

NYPL RESEARCH LIBRARIES



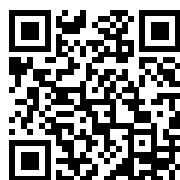
3 3433 10992 3320

---

This is a reproduction of a library book that was digitized by Google as part of an ongoing effort to preserve the information in books and make it universally accessible.

Google<sup>TM</sup> books

<https://books.google.com>









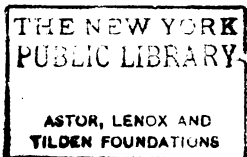
Farley's

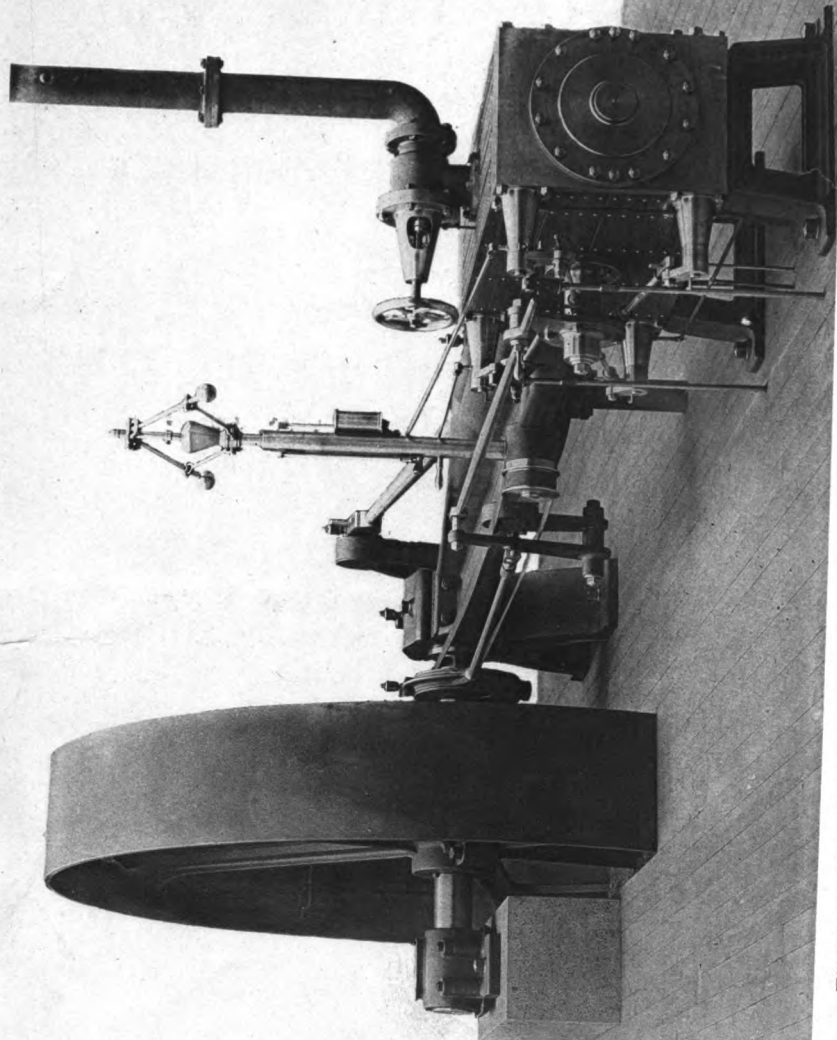
Digitized by Google  
308A











THE HARRIS-CORLISS STEAM ENGINE, MANUFACTURED BY WILLIAM A. HARRIS.  
MANUFACTORY (ESTABLISHED 1864), PROVIDENCE, R. I.

FARLEY'S DIRECTORY  
OF THE  
METAL WORKERS

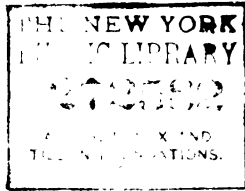
OF THE  
UNITED STATES, CANADA AND THE BRITISH PROVINCES.  
COMPRISING THE  
MACHINISTS, ENGINE BUILDERS AND BOILER  
MAKERS; IRON AND BRASS FOUNDERS  
AND MANUFACTURERS; PLUMBERS,  
GAS AND STEAM FITTERS.

WITH A LIST OF  
COMMISSION MERCHANTS AND DEALERS IN MACHINERY IN  
SOUTH AND CENTRAL AMERICA.  
AND A CLASSIFIED DIRECTORY OF  
MANUFACTURERS AND DEALERS IN MATERIALS AND MACHINERY  
USED BY THE METAL WORKING TRADES.

---

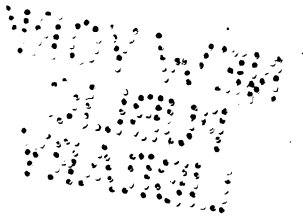
PHILADELPHIA :  
FARLEY, PAUL & BAKER, PUBLISHERS,  
530 Market Street.

1883.



LIBRARY AMERICANA

COPYRIGHT, 1983.





## PREFACE.

---

*In the preparation of this first Edition of the METAL WORKERS DIRECTORY, the extent of territory to be covered, and the variety of the trades represented, have rendered the compilation unusually difficult; but we have spared no labor or expense that was necessary to make the work complete in every particular.*

*In a publication of this character, especially in the first issue, it is impossible, even with the greatest care, to avoid some inaccuracies, and we would be glad to have our subscribers inform us of any errors that may come to their notice.*

THE PUBLISHERS.



## TABLE OF CONTENTS.

---

PREFACE . . . . .	C
INDEX TO ADVERTISERS . . . . .	E
METAL WORKERS IN THE UNITED STATES . . . . .	1
METAL WORKERS IN CANADA AND BRITISH PROVINCES . . . . .	184
COMMISSION MERCHANTS AND DEALERS IN MACHINERY, ETC., IN SOUTH AND CENTRAL AMERICA . . . . .	197
CONSULS IN SOUTH AND CENTRAL AMERICA . . . . .	203
CLASSIFIED DIRECTORY . . . . .	205



# INDEX TO ADVERTISERS.

Adamson, S. E.....	XXXIV.	Crouch, Wesley.....	LII.
Adt, John.....	XXXIII.	Crystal Emery Wheel Co.....	XIV.
Age of Steel. See inset opp. p. 161.		Cuthbert, Thos. N.....	XXIX.
Aitchison, Robert Perforated Metal Co.....	XXXIX.	Cutler & Brown.....	XXII.
Albany Steam Trap Co.....	IV.	Davis, John & Co.....	V.
Allen, Wm. & Sons.....	IX.	Dennison Mfg. Co (also back of cover).....	XLVII.
Almond, Thos. R.....	XXXVII.	Dreyfuss, Bernard.....	XXII.
American Photo-Lith. Co.....	XXXV.	Dudgeon, Richard.....	XXII.
American Machinist, See inset opp. p. 9.		Electro Dynamic Co., See inset opp. p. 138 & 139.	
American Manufacturer " " " 160.		Empire Portable Forge Co.....	
American Saw Co.....	XLIV.	See inside back cover	
Ames Mfg. Co. See inset opp. p. 104.		Excelsior Gas Light & Mfg. Co.....	VI.
Andover Iron Co.....	XIII.	Farley, Paul & Baker. See back flyleaf,	
Andres, H.....	XXXV.	also inset opp. p. 223.	
Armstrong, F. See inset opp. p. 8.		Paul, W. J.....	XXVI.
Asbestos Felting Works.....	XXVI.	Fisher, Hiram H.....	L.
Ashcroft Man'g Co.....	XLVI.	Fisher & Norris.....	XIX.
Ashcroft John Mfg. Co.....	XXV.	Flanders, L. R. Machine Works.....	X.
Austin, Obdyke & Co.....	VII.	Ford & Kendig.....	III.
Babcock & Wilcox Co.....	XXV.	Forsaith, S. C., & Co.....	XXVIII.
Baird, Henry Carey & Co.....	L.	Frisbie, D. & Co.....	XVI.
Becker, John.....	XV.	Gannon, Thomas.....	XIV.
Beckett & McDowell Mfg. Co.....	XXXIX.	Garvin, E. E. & Co.....	XXXVIII.
Beecher & Peck.....	XL.	George Place Machinery Co.....	
Beers, James M.....	VIII.	See inset opp. p. 8.	
Bickerton, T. B. & Co.....	XXXV.	German & Robinson.....	VII.
Blewitt, James.....	XXVII.	Gilmour, R. M.....	XLIV.
Boker, Hermann & Co.....	XXX.	Goshen Foundry & Gas Machinery Co.....	XXIV.
Borgner & O'Brien.....	IX.	Greene, Tweed & Co.....	XXV.
Boston Photo. Eng. Co.....	XLV.	Gutekunst, F..... See inside back cover.	
Brandt, Randolph.....	LII.	Hall & Carpenter..... See inset opp. p. 155.	
Brewer, D. & Co.....	XL.	Hanford, W.....	XLIV.
Brown & Owen.....	III.	Harrison Boiler Works.....	XI.
Bulger, Jas., Jr.....	VII.	Harrison, Chas. & Co.....	VI.
Cammeyer & Sayer.....	XXVI.	Hartford Steam Boiler Co. (and back	
Carmichael & Emmens.....	XXI.	outside cover).....	XVI.
Carr, A.....	VI.	Hay & Prentice.....	V.
Carter, Edward.....	XI.	Heim Leather Belting Co.....	XXVII.
Chalmers-Spence Co.....	XXVIII.	Heliotype Printing Co (also frontispiece).....	XXI.
Champion Belt Hook Co.....	XXI.	Hewes & Phillips.....	LI.
Chapman Valve Mfg. Co.....	III.	Hinsdale, Capt. C. & Son.....	IV.
Chester Steel Castings Co.....	XXXV.	Hodson, G. & J. See inset opp. p. 222.	
Clark, Geo. P.....	XLIV.	Holden, H. S.....	XV.
Clem & Morse.....	XLVIII.	Holland & Thompson. See inset opp. p. 219.	
Consolidated Safety Valve Co.....	XLVI.	Horton, E. & Son Co.....	XIII.
Cooke & Co.....	XLII.	Hotchkiss, Jas. F.....	XX.
Cooney, Daniel F.....	XXVI.	Houghton & Co.....	XXV.
Cooper, Jones & Cadbury.....		Hubbard, Charles.....	XXXVI.
See inset opp. p. 155.		Jamer, Jacobs & Co.....	XLIV.
Cornell, J. B. & J. M.....	XXIII.	Johns, H. W., Mfg. Co.....	XXXI.
Creque, Ronalds & Co.....	VIII.	Jones, S. W. See inset opp. p. 222.	
Cresson, Geo. V.....	XII.	Justice, Philip S., & Co.....	XXX.
Creswell, David S.....	XLIII.	Katzenstein, L.....	XXV.
Crosby Steam Gage & Valve Co.....	VIII.	Kaufman, A.....	XXVIII.
Crosscup & West Engraving Co.....		Kent, D. H., & Co., Limited.....	
See inset opp. p. 144.		See front fly leaf.	

# INDEX TO ADVERTISERS.

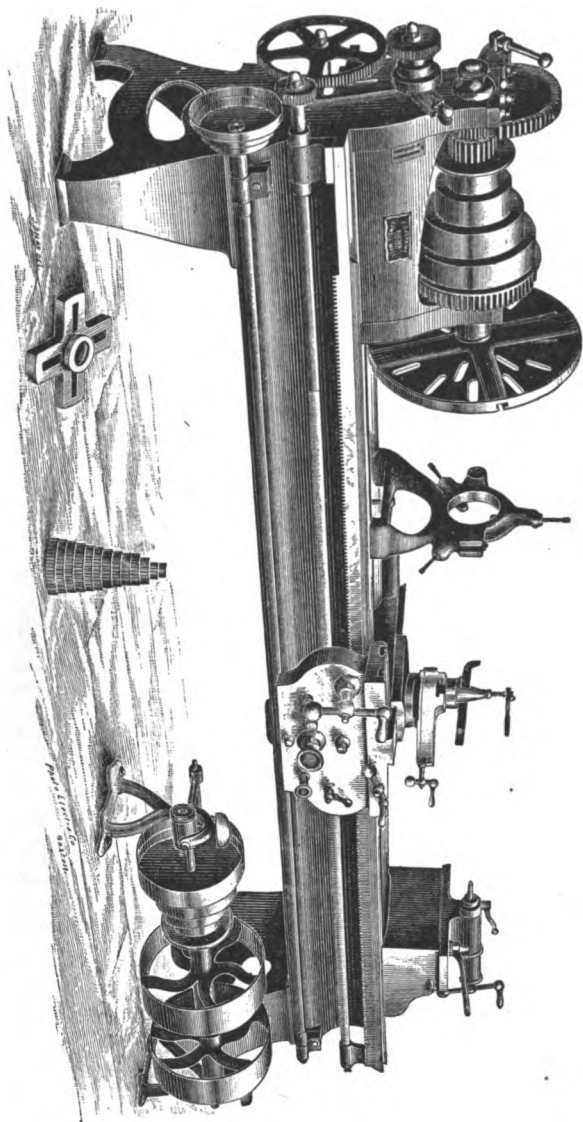
Keystone Portable Forge Co.....	XLIV.	Repauno Chemical Co. See inset opp. p. 218.	
Kimball, C. E.....	XIV.	Roberts, Dwight.....	XXI.
Knapp Mfg. Co.....	XXVII.	Robertson, Geo. W.....	See inset opp. p. 222.
Lancaster Mfg. Co.....	XLIX.	Robinson, C. E., & Co.....	V.
Lehigh Valley Emery Wheel Co.....		Roebling's, John A., Son's Co.....	XXXII.
See inset opp. p. 222.		Rogers, C. B. & Co.....	XXIII.
Leonard & McCoy.....	XXVIII.	Rogers, H. A.....	XXV.
Lord, Geo. W.....	XL.	Rogers, L. W.....	
Lovell, F. S.....	LI.	Rue Manufg. Co.....	XII.
Ludlow Valve Mfg. Co. See inset opp. p. 219.		Ruffner & Dunn.....	XXXVIII.
Lyon, E. & Co.....	XXXVI.	Ryan, J. J., & Co.....	XXXVII.
McCoy & Sanders.....	XXX.	Salamander Grate Bar Co.....	XXXI.
McNab & Belden.....	XXIX.	Schäffer & Budenberg.....	XXVII.
Mahler, P.....	XXXIX.	Schoenberg Metal Mfg. Co.....	L.
Maneely, John.....	VIII.	Scientific American. See front fly leaf.	
Manning, Maxwell & Moore.....	XLVI.	Sellers, Wm. & Co.....	See inset opp. p. 153.
Marcellus, C. N. & Co.....	V.	Shaw, T.....	VII.
Merchant & Co.....	See inset opp. p. 204.	Shumway, Burgess & Co.....	XI.
Middleton, W. S.....	XXVIII.	Simmons, John.....	XXIX.
Midvale Steel Co.....	See inset opp. p. 145.	Skidmore, P. H., & Sons.....	XXXI.
Moore, John D.....	XXXI.	Slate, Dwight.....	XXXIX.
Morris, I. P. Co.....	XI.	Smith H. R. Mach. Co. See inset opp. p. 154.	
Morris, Wheeler & Co.....	XVIII.	Snead & Co. Iron Works. See inset opp. p. 205.	
Moss Engraving Co. See inset opp. p. 112 & 113.		Southwark Foundry & Mach. Works..	XL.
Motley & Sterling.....	XXVII.	Spon, E. & F. N.....	XXIII.
Munn & Co.....	See front fly leaf.	Springfield Glue & Emery Wheel Co..	XXXVIII.
Nathan & Dreyfus.....	XXVII.	Storer, G. W.....	See back fly leaf.
National Mfg. Co.....	XXXIV.	Stow Flexible Shaft Co., Limited.....	
National Tube Works Co.....	II.	See inset opp. p. 152.	
Naugatuck Machine Co.....	XXXVII.	Supplee, Thomas R.....	XXXVII.
Newell Universal Mill Co.....	LII.	Sweetland & Co.....	XI.
New, T.....	XXIX.	Taft, George C.....	L.
New York Belting & Packing Co.....	XXIII.	Tallman & McFadden.....	XLIII.
New York Machine Co.....	L.	Tanite Co.....	See inside front cover.
Novelty Belt Hook Co.....	XXXIV.	Thompson, James R., & Co.....	XXX.
Ohl, Geo. A. & Co.....	XLVIII.	Toomey, Frank.....	See inset opp. p. 145.
Osborne & Cheesman Co.....	XV.	Town & Bro.....	XXXV.
Pancoast & Maule.....	XLII.	Trevor & Co.....	See inset opp. p. 205.
Parsons, H. E.....	XIX.	Tuttle, D. H.....	L.
Parsons & Landon.....	XL.	Union Foundry & Pullman Car Wheel	
Paul, Geo. K. & Co.....	VII.	Works.....	XV.
Peet Valve Co.....	II.	Van Depoele Electric Light Co.....	XV.
Pennsylvania Brass Works.....	XII.	Van Nostrand, D.....	IX.
Phila. Galvanizing Co.....	IX.	Valley Machine Co.....	XVI.
Phosphor Bronze Smelting Co.....	XLVIII.	Vanderburgh, Wells & Co.....	LII.
Photo Electrotype Eng. & Mfg. Co....		Vanderbilt & Hopkins.....	XXII.
See inset opp. p. 1.		Watertown Steam Blower Co.....	XIX.
Photo Engraving Co. See back fly leaf.		Wells Bros. & Co.....	See inset opp. p. 105.
Place, Geo. Machn'y Co. See inset opp. p. 8.		White & Crowell.....	XXVI.
Pond, David W.....	See inset opp. p. 205.	Wiley & Russel Mfg. Co. See inset opp. p. 105.	
Pool, A. Alex. & Co.....	LII.	Wilkinson, Alfred.....	LII.
Powell, A. M. & Co.....	XLIX.	Williamson & Cassidy.....	XXXVII.
Pratt & Candee.....	XIV.	Wood, James P., & Co.....	VIII.
Prentiss, H. & Co.....	XXIX.	Wood, R. D., & Co.....	V.
Pullman, J. Wesley.....	XIII.	Wyoming Valley Mfg. Co.....	
Putnam Machine Co.....	XXII.	See inset opp. p. 219.	
Reading Iron Works... See inset opp. p. 154.			



# Photo-Electrotype Engraving and Manufacturing Co.

Superior Cuts of Machinery at much less cost than Wood Engraving.

Send Photographs of Machinery, and stamp for estimate.



63 OLIVER ST, BOSTON, MASS.



# FARLEY'S METAL WORKERS' DIRECTORY.

## ALABAMA.

### ALABAMA FURNACE.

Alabama Iron Co.....Mfrs. Iron.  
Clifton Iron Co.....Iron Works.

### ANNISTON.

Woodstock Iron Co.....Iron Works.

### BARTON.

Mountain Mill Co.....Iron Foundry.

### BIRMINGHAM.

Alice Furnace Co.....Iron Works.  
Beggs, H. T. & Son.....Iron Foundry.  
Birmingham Rolling Mill Co.....  
Comer & McCurdy.....Iron Works.  
Dunavant, J. H.....Mfr. Agl. Impts.  
Elliot, A. S.....Plumber & Gas Fitter.  
Jefferson Foundry & Machine Works.  
Knauff, R. & Co.....Plumbers & Gasfitters.  
Linn Iron Works.....Founders & Machinists.  
Moore, Moore & Hanly.....Machinists.  
Sloss Furnace Co.....Iron Works.  
Stanford & Hart.....Boilermakers.  
Williamson, C. P.....Iron Foundry.

### BLOUNTSVILLE.

Parker, W. P.....Machinery.

### BRIERFIELD.

Brierfield Rolling Mill, Co  
Huckabee, C. C. & Co.....Iron Works.

### CARROLLTON.

Latham, A. W. & H. P.....Machinists.

### CEDAR BLUFF.

Cornwall Iron Works.

### COLUMBIA.

Powers, E. J.....Machinist.  
Shelby Iron Co.....Mfrs. Iron.

### DAY'S MILL.

Bibb Iron Works Co.  
Shepard & Carter.....Iron Works.

### DECATUR.

Doolittle, S. M.....Machinist.

### EUFAULA.

Folsom Bros.....Plumbers.  
Sander, James H.....Founder & Machinist.

### GADSDEN.

Hagen & Flynn.....Iron Foundry.

### GREEN POND.

Sharpe, J. H.....Iron, &c.

### HELENA.

Central Iron Works & Rolling Mills Co.

### HUNTSVILLE.

Corbett, J. S.....Plumber.  
Curry, McGee & Turner.....Machinists.  
Gladdish, W. J.....Machinist.

### LANDERSVILLE.

Jones, R. S.....Machinery.

### MIDWAY.

Jordan, W. C.....Machinery.

### MOBILE.

Fermier, J.....Plumber.  
Giney, P. J.....Boilermaker.  
Gomez, F.....Sheet Iron.  
Gulf City Foundry Co.....Boilermakers.

## MOBILE—Continued.

Murray, D.....Sheet Iron Worker.  
Hines, Michael M.....Boilermaker.  
Keyland, W. & Co.....Mfrs. Sheet Iron.  
Kling, August.....Iron Foundry.  
Lang, John & Co.....Iron Founders & Machinists.  
Ludlow, N. K.....Gasfitter & Plumber.  
McCosker, Felix & Son.....Gasfitters & Plumbers.  
Mellett, Richard.....Machinery.  
Rennick & Ivers.....Iron Foundry.  
Schuemann, A.....Machinist.  
Shultz, J. W.....Sheet Iron Worker.  
Unlacke, James.....Iron Worker.  
Wagner & Palmer.....Plumbers & Gasfitters.  
Young, A. L. & Co.....Gasfitters.

## MONTGOMERY.

Dudley, A. J. & Co.....Plumbers & Gasfitters.  
Engelhardt, David.....Plumber & Gasfitter.  
Janney, A. A.....Iron Foundry.  
Jube, I. N.....Plumber.  
Liddell, Forbes.....Machinery.  
Montgomery Iron Works.  
Parker, James.....Iron Foundry.  
Snodgrass, H. B. & Co.....Machinery.

## MURPHREES VALLEY.

Hyatt, David.....Machinery.

## OPELIKA.

Opelika Iron Works.  
Sudduth, C. J.....Iron Foundry.

## OXMOOR.

Eureka Iron Co.....Iron Works.

## PLEASANT GAP.

Bass Furnace Co.

## ROUND MOUNTAIN.

Sibley, R. P.....Iron Works.

## SELMA.

Crawford, D.....Boiler Maker.  
Gregory, Coe & Pollock.....Iron Workers.  
Hayward & Campbell.....Machinists.  
Peacock, Geo.....Iron Works.  
Rennie & Campbell.....Machinery.

## SPRINGVILLE.

Carlisle, Hugh.....Iron.

## STONEWELL.

Stonewell Iron Co.

## TALLADEGA.

Bingham, Arthur & Co.....Foundry.

## TECUMSEH.

Tecumseh Iron Co.....Mfrs. Iron.

## TROY.

Brantley & Fettes.....Machinists.

## UNION SPRINGS.

Beebe & Bigsby.....Machinery.

## ARIZONA.

### GLOBE.

Fiske, H. W.....Machinist.

### PRESCOTT CITY.

Crown, C. T.....Machinist.  
Wilson & Haskell.....Founders & Machinists.

### SUNSET.

McNeil, J. R.....Machinist.

**TOMBSTONE.**

Atchison, T. A. .... Plumber  
Harris, T. S. .... Machinist

**ARKANSAS.****ARGENTA.**

Eblin, Jas. .... Little Rock & Fort Smith R. R.  
Rennell, Thos. .... Memphis & Little Rock R. R.

**ARKADELPHIA.**

Murphy, T. O. C. .... Machinery.

**CAMDEN.**

Merrill, John. .... Machinery.

**CLARKSVILLE.**

Marty, J. M. .... Iron Foundry.

**DARDANELLE.**

De Long, W. E. .... Machinist.

**PAYETTEVILLE.**

Hendry, Alex. .... Machinist & Founder.  
Volner, Amos. .... Foundry.

**FORT SMITH.**

Atkinson, B. F. .... Machinery.  
Johnson, W. W. .... Machinist.  
Mehlberger, Phil. .... Iron Foundry.

**HAMBURGH.**

Knight, N. .... Machinist.

**HELENA.**

Johnson, J. B. .... Arkansas Midland R. R.

**HOLLY SPRINGS.**

Thompson, F. W. .... Machinist.

**HOT SPRINGS.**

Greaves, J. .... Plumber.  
Walsh, A. J. .... Plumber.

**KENSETT.**

Bessett, Chas. .... Machinist

**LITTLE ROCK.**

Carroll, S. C. .... Plumber.  
Cobb, R. L. & Co. .... Machinists & Founders.  
Donald, Wm. .... Boilermaker.  
Doyle, J. T. & Co. .... Plumbers & Gasfitters.  
Grindrod & Marshall. .... Brass Foundry.  
Haley & Ketcher. .... Copper Works.  
Little Rock Agl. Works. ....  
McGuire & Bro. .... Foundry.  
Ruof, Wendell. .... Iron Foundry.  
Wnerry, Jno. R. & Co. .... Plumbers, &c.  
Wing, D. R. & Co. .... Iron Foundry.

**PINE BLUFF.**

Ackhurst, Wm. C. .... Machinist.  
Bocage, J. W. & Co. .... Iron Foundry.  
Franklin, Samuel. .... Gasfitter.

**SEARCY.**

Faucett, C. J. .... Machinist.

**SMITHVILLE.**

Gaskill, R. R. .... Machinery.

**TEXARKANA.**

Kelley & Co. .... Boiler Makers.  
McLean, R. A. .... Machinery.

**CALIFORNIA.****ALAMEDA.**

Brady, Terence. .... Plumber.  
Cannon, Thomas. .... Plumber.  
Engel, S. .... Plumber.  
Fischer & Stahl. .... Plumbers.  
Mazzini, L. .... Plumber.  
Mills & Fisher. .... Plumbers.  
Quast, John. .... Plumber.

**ALTAVILLE.**

Demarest, D. D. .... Iron Foundry.

**ALVARADO.**

Tay, Geo. H. & Co. .... Stove Foundry.

**ANTIOCH.**

Cecil, Thomas. .... Machinist.

**BATAVIA.**

Francis, E. .... Machinist.

**BENICIA.**

Benicia Agricultural Works. .... Mfrs. Agri. Impls.  
Gilley, F. A. .... Planter.

**BERKELEY.**

Frazer, M. .... Plumber.  
Horst, E. J. .... Plumber.

**BODIE.**

Wells & Kilpatrick. .... Iron Foundry.

**BROOKLYN.**

Kirk, O. S. .... Plumb r.

**CHICO.**

Graf & Johnson. .... Mfrs. Agri. Impls.  
Hubbard & Earl. .... Iron and Steel.  
Merry, M. L. .... Iron Foundry.

**COLUSA.**

Smith, S. R. .... Machinist.

**CORDELIA.**

Knapp, Mort. .... Plumber.

**DIXON.**

Cadman, Geo. .... Machinist.

**DONAHUE.**

Reynolds, Ed. San Francisco & North Pacific R.R.

**DOWNIEVILLE.**

Taylor & Forbes. .... Iron Foundry.

**EUREKA.**

Lanigan, T. J. .... Iron Foundry.  
Loveien, S. S. .... Machinist.

**FAIRFIELD.**

Donaldson, J. W. .... Machinist.

**FERNDALE.**

Francis, Thos. P. .... Plumber.

**FOLSOM.**

Nichols, Eli. .... Machinist.

**GILROY.**

Curtis, N. P. .... Machinist.  
Woolsey, J. S. .... Machinist.

**GRASS VALLEY.**

Lakenan, James M. .... Iron Foundry.  
Taylor, M. C. .... Iron Foundry.

**GREENVILLE.**

Bidwell & Watson. .... Iron Foundry.

**GRIDLEY.**

Porter, J. W. & J. L. .... Machinists.

**GUADALUPE.**

Hart, Thoma. .... Machinist.

**HANFORD.**

Barnes & Goble. .... Machinist.

**HEALDSBURG.**

Metzger Bros. .... Iron and Steel.

**HICKSVILLE.**

Herbert & Henry. .... Pump Manufacturers.

**HOLLISTER.**

Wells & Ellis. .... Machinists.

**LIVERMORE.**

Aylward, J. .... Boiler Maker.

**LOS ANGELES.**

Bower & Baker,.....Machinists.  
 Crimmins, J.,.....Plumber.  
 Gosselin, F.,.....Plumber.  
 McMenomy, J. C.,.....Plumber.  
 Manning, Thomas,.....Plumber.  
 O'Donnell, P. N.,.....Iron Foundry.  
 Perry & Pollard,.....Plumbers.

**MARYSVILLE.**

Booth, H. J. & Co.,.....Iron Foundry.  
 Hoskins, Richard & Co.,.....Iron Foundry.  
 McGuire & Schmidt,.....Machinist.

**MAYFIELD.**

Brown, Leonard,.....Machinist.

**MENLO PARK.**

Warren, E.,.....Plumber.

**NAPA CITY.**

Dennison & Son,.....File Mfrs.  
 Hunter, W.,.....Mfr. Plows.

**NELSONS.**

Delaware & Paxton,.....Machinists.

**NEVADA CITY.**

Allan, G. G.,.....Iron Foundry.  
 Lawrence & Barlow,.....Iron Foundry.

**NEWARK.**

Ingraham, O. P. & Bro.,.....Iron Works.

**OAKLAND.**

Bonham & Rankin,.....Plumbers & Gas Fitters.  
 Clark & Woolley,.....Boiler Makers.  
 Dalziel, R.,.....Plumber.  
 Dalziel & Moller,.....Plumbers & Gas Fitters.  
 Frauneder, L.,.....Machinist.  
 Herget, E. W. & Co.,.....Machinists.  
 Kirk, O. C.,.....Plumber & Gas Fitter.  
 Loeper, C. F. G.,.....Brass Founder.  
 McCourtney, Paul,.....Plumber & Gas Fitter.  
 McDonald, J. A. C.,.....Plumber & Gas Fitter.  
 McGivoney, James,.....Plumber.  
 Madden, Henry,.....Plumber.  
 Moran & Galavan,.....Plumber.  
 Oakland Boiler Works,.....Boiler Makers.  
 Rode, C.,.....Machinist.  
 Rooney, J. W.,.....Plumber.  
 Scott, George,.....Plumber.  
 Seville, Ives,.....Machinist & Iron Works.  
 Spencer, J.,.....Plumber.  
 Vance, J. F.,.....Plumber & Gas Fitter.

**ORLAND.**

Rynerson, L.,.....Iron Founder & Machinist.

**PACHECO.**

Dalton, H.,.....Foundry.  
 Standish, S.,.....Machinist.

**PETALUMA.**

Bowman, John C.,.....Plumber.  
 Worth, H. H.,.....Founder & Machinist.

**PLACERVILLE.**

Morey, H. S.,.....Iron Foundry.

**PLYMOUTH.**

Potter, E. S.,.....Plumber.

**REDWOOD CITY.**

Jamison, P. B.,.....Plumber.

**ROSEVILLE.**

Nehr & Co.,.....Mfrs. Agl. Impts.

**ST. HELENA.**

Jacks & Cook,.....Plumbers.

**SACRAMENTO.**

Ames, Earle & Co.,.....Plumbers & Gas Fitters.  
 Anderson, R.,.....Boiler Maker.  
 Bauer Bros.,.....Coppersmiths.  
 Bush, Geo. T.,.....Plumber & Gas Fitter.

**SACRAMENTO—Continued.**

Central Pacific R. R. Rolling Mill.  
 Cunningham, J. A., Boiler Maker & Iron Works.  
 Fisher, N.,.....Machinist.  
 Fitzsimons, P.,.....Plumber.  
 Grant, A. Purves,.....Brass Foundry.  
 Guthrie Bros.,.....Plumbers & Gas Fitters.  
 Guttenberger, Wm.,.....Iron Foundry.  
 Hays, H. G.,.....Plumber.  
 Hoyt, W. H.,.....Plumber.  
 Huntingdon & Hopkins,.....Iron & Steel.  
 Laufkotter, Chas.,.....Plumber.  
 Laufkotter Bros.,.....Plumbers.  
 Lloyd, Andrew,.....Plumber.  
 Loftus, Thos. J.,.....Brass Founder.  
 McGuire, James,.....Iron Door Mfr.  
 McWilliams, H. H.,.....Iron Foundry.  
 Root, Nelson & Co.,.....Iron Foundry.  
 Rose, M. R.,.....Machinist.  
 Sanze & Hayes,.....Plumbers.  
 Scott & Muir,.....Plumbers.  
 Smith, A. M.,.....Plumber.

**SALINAS.**

Clark, Wm.,.....Plumber.  
 Hagan, James,.....Plumber.

**SAN DIEGO.**

Bidwell, James,.....Machinist.  
 Herrandner, John,.....Machinist.  
 Moore, Alex.,.....Iron Foundry.  
 Nottage, E. W.,.....Gas Fitter.

**SAN FRANCISCO.****BOILER MAKERS.**

Golden State & Miners Iron Works,.....237 1st.  
 Hall, James V.,.....214 Beale.  
 Hinkley, Spiers & Hayes,.....207 Fremont.  
 McAfee & Co.,.....212 Spear.  
 McCone, Robert,.....403 Beale.  
 Moynihan & Aitken,.....311 Mission.  
 Prescott, Scott & Co., N. E. cor. 1st and Mission.  
 Pretorius, Trowbridge & Co.,.....141 1st.  
 Rankin, Brayton & Co.,.....120 Fremont.  
 Risdon Iron & Locomotive Works, S. E. cor. Howard and J. Beale.  
 Roebuck, Thos. G.,.....137 Beale.  
 Schober & Seffrin,.....203 Fremont.

**BRASS FOUNDERS.**

Baud, Frank,.....522 Fulton.  
 Bell, John P.,.....18 Fremont.  
 Engels, Wm.,.....Utah, nr. 24th.  
 Garrett, W. T.,.....138 Fremont.  
 Giovanni & Co.,.....417 Mission.  
 Greenberg & Co.,.....205 Fremont.  
 Olsson & Bennerscheidt,.....111 1st.  
 Pretorius, Trowbridge & Co.,.....141 1st.  
 Roylance, Joseph,.....45 Fremont.  
 Tay, Geo. H. & Co.,.....614 Battery.  
 Wagstaff, T. H.,.....Bond, nr. 17th.  
 Weed & Kingwell,.....125 1st.

**IRON FOUNDERS.**

Bigelow & Morris,.....316 Mission.  
 Crist, W. E. & Co.,.....215 1st.  
 Deacon, Wm.,.....131 Main.  
 Garcien & Co.,.....294 Howard.  
 Golden State & Miners Iron Works,.....235 1st.  
 Goss & Adams,.....114 Beale.  
 Hinkley, Spiers & Hayes,.....213 Fremont.  
 Iils, J. G.,.....814 Kearny.  
 Jackson & Truman, S. E. cor. 6th and Bluxome.  
 Jardine, J. B.,.....135 Beale.  
 Kittredge, Jonathan,.....18 Fremont.  
 Leavitt, C. H.,.....225 Beale.  
 Llewellyn, Reese,.....135 Beale.  
 Low & Chartry,.....28 Fremont.  
 McCormick, Lewis & Co.,.....233 Beale.  
 Marshutz & Cantrell, N. W. cor. Main and Howard.  
 Mechanics Foundry,.....217 1st.  
 Morrow & Strong,.....115 1st.  
 Muir, Adam,.....1015 Battery.  
 Nuttall, Bacon & Co.,.....143 Fremont.  
 Nutting, C. & Son,.....121 Fremont.

**SAN FRANCISCO—Continued.**

O'Connell, Martin	420 Beale.
Pacific Stove & Iron Foundry	228 Main.
Pendergast, Smith & Co.	217 Fremont.
Pfeiffer & Peterson	317 Howard.
Prescott, Scott & Co.	N. E. cor. 1st and Mission.
Ralston, H. & J.	151 Beale.
Rankin, Brayton & Co.	127 1st.
Risdon Iron & Locomotive Works, S. W. cor. Howard and Beale.	
Savage & Sons	141 Fremont.
Schober & Seffrin	203 Fremont.
Steiger & Kerr	137 1st.
Taint & Bros.	115 Beale.
Thompson Hardware	129 Beale.
Tobey, Curtis	228 Fremont.

**IRON AND STEEL.**

Arnold, N. S. & Co.	310 California.
Bruns, Henry	306 Mission.
Carolan, Cory & Co.	117 California.
Chandler, Richard D.	118 Pacific.
Coleman, W. T. & Co.	S. W. cor. California and Front.
Doble, Abner	13 Fremont.
Dunham, Carrigan & Co.	107 Front.
Gibbs, Geo. W. & Co.	35 Fremont.
Haste & Kirke	21 Beale.
Huntingdon, Hopkins & Co.	Junction Bush and Market.
Jafray, William	204 California.
Linforth, Rice & Co.	323 Market.
Lund, Henry	214 California.
Macdonough, Joseph	41 Market.
Montague, W. W. & Co.	110 Battery.
Morris, H. B.	14 Fremont.
Selby, Thos. H. & Co.	116 California.
Seeley, L. B.	N. W. Cor. Folsom and Main.
Simpkins, Chas. H.	328 Montgomery.
Van Winkle, I. S. & Co.	413 Market.
Whitney & Marshall	22 Fremont.
Williams, Dimond & Co.	202 Market.

**MACHINERY AND MACHINISTS' SUPPLIES.**

Arnold, N. S. & Co.	310 California.
Baker & Hamilton	13 Front.
Berry & Place Machinery Co.	323 Market.
Fish, A. L. & Co.	9 1st.
Gregory, H. P. & Co.	2 California.
Hendy, Joshua	N. E. cor. Mission and Fremont.
Huntington, Hopkins & Co.	Car Wheels & Springs, Junction Market and Bush.
Marwedel, C. F.	56 1st.
McCone, Robert	403 Beale.
Parke & Lacy	21 Fremont.
Reynolds & Rix	Mining Machinery, 49 Fremont.
Steen, Edward T.	107 Beale.
Tatum & Bowen	329 Market.
Whitelaw, T. P. H.	Foot of 2nd.

**MACHINISTS.**

Brier, Joseph	412 Commercial.
Birch, W. H.	119 Beale.
Clot, J. E. & Co.	303 Mission.
Crist, W. E. & Co.	215 1st.
Ieacon, William	131 Main.
Dodge, Miles B.	143 Fremont.
Dudgeon, Eneas M.	706 Minna.
Dye, Elam	221 Mission.
Ertola, Biago	1508 Dupont.
Fleischel, George	614 California.
Fuller, F. W.	419 Sacramento.
Galli, Joseph & Co.	504 Commercial.
Garratt, William T.	142 Fremont.
Garcien, Son & Co.	294 Howard.
Golden State & Miners' Iron Works	235 1st.
Goss & Adams	114 Beale.
Gracier, F. J.	211 Mission.
Gross, A. P.	51 Fremont.
Harris, James	308 Mission.
Harris, Oswald & Noble	208 Leidersdorf.
Hawkins, William	210 Beale.
Hawkins & Co.	32 Fremont.
Hend, I. A.	514 Commercial.
Hendy, Joshua	N. E. cor. Mission and Fremont.
Hinckley, Spiers & Hayes	213 Fremont.

**SAN FRANCISCO—Continued.**

Huntingdon, F. A.	220 Fremont.
Jackson & Truman	S. E. cor. 6th and Bluxome.
Jardine, Joseph B.	135 Beale.
Joinet, Victor	510 Commercial.
Kallenberg, Theodore	32 Fremont.
Leavitt, C. H.	225 Beale.
Lenhardt, K.	10 Stockton.
Lockhead, J.	252 Spear.
Low & Chartrey	28 Fremont.
McCone, Robert	403 Beale.
Marshutz & Cantrell, N. W. cor. Main and Howard.	
Muir, Adam	1015 Battery.
Ohmen, W. H.	51 Fremont.
Osborne, D. M. & Co.	33 Market.
Pendergast, Smith & Co.	217 Fremont.
Periam, C. J.	318 Mission.
Prescott, Scott & Co.	N. E. cor. 1st and Mission.
Quick, John W.	32 Fremont.
Rankin, Brayton & Co.	127 1st.
Rice, Harvey W.	56 Bluxome.
Risdon Iron & Locomotive Works	S. E. cor. Howard and Beale.

Robbins, F. A.	7 1st.
Russell, E. F.	35 Rose Alley.
Schoenstein, F. B.	511 Fulton.
Small, Isaac H.	574 Brannan.
Tait & Hainque	115 Beale.
Thompson, F. H.	51 Beale.
Thompson & Evans	112 Beale.
Todt & Boss	19 1st.
Vincent, George	419 Sacramento.
Wakington, S. B.	109 Mission.
Weichart, J.	143 Beale.
Whaites, William N.	423 Washington.
Wilcox, W. C.	919 Market.

**PLUMBERS, STEAM AND GAS FITTERS.**

Adams, John O.	S. E. cor. Henderson and Point Lobos Av.
Ahlbach, Jacob	231 4th.
Allen, W. R. & Co.	761 Market.
Alvey, C. W.	24 Montgomery Av.
Bailey, Samuel C.	1621 Fillmore.
Bennett, Wm.	1015 Clay.
Bertram, Thomas	1017 Folsom.
Blackman, Morris J.	225 Hayes.
Bohn, John	112 7th.
Boyd, E. T.	840 Clay.
Brady, Edward	423 Pine.
Brook & Kneass	1006 Market.
Brown, Chas.	18 Dupont.
Bush, David	22 Post.
Butterworth, James	1149 1/2 Folsom.
Connor, J. H. & Co.	528 3rd St.
Cook, Edward E.	1210 1/2 Polk.
Cope, Thos.	1622 Mission.
Corey, Thos.	204 Pacific.
Craig, John R.	35 Eddy.
Crowley, G.	230 6th.
Culley & Force	1166 Market.
Daily, John T.	1038 Folsom.
Daniel, W. L.	234 Post.
David & Lynch	1018 Stockton.
Day, Thomas	122 Sutter.
Dodge, Henry W.	1030 Sutter.
Doherty, John P.	S. W. cor. Kearny and Pine.
Dowdall, Joseph F.	610 Laguna.
Downes and Deery	41 2nd.
Doyle, James P.	822 Laguna.
Duncan, John M.	1136 Mission.
Eccles, John S.	2520 Mission.
Elder & Dobbie	606 Clay.
Enright, Wm. & Co.	39 Sutter.
Eppe, Geo.	117 Washington.
Ertola, Andrea	1528 Dupont.
Firman, John L. E.	240 O'Farrell.
Fitzpatrick, Patrick D.	1325 1/2 Vallejo.
Flynn, John W.	1506 California.
Forsyth, Wm. C.	1077 Market.
Freeman & Wrinn	326 3rd.
Fritz & Kean	130 Geary.
Goger, Charles	202 Dupont.
Goldsmith, George	1507 Pine.
Gourdon, Armand	607 Post.
Greenhaigh, John H.	6 Broadway.
Greninger, Daniel	542 4th.

## SAN FRANCISCO—Continued.

Grimm, Adolph,	230 Montgomery Av.
Hayes & Fenlon,	1528 Polk.
Healy, Timothy J.,	532 Bush.
Hildebrand, Conrad,	181 16th.
Hobro, W. D.,	727 Washington.
Hoffman & Ernst,	1214 Stockton.
Horrigan, M. J. & Bro.,	1612 Lear.
Hoy, Alexander,	1012 Stockton.
Hufschmidt, L. & Bro.,	637 Clay.
Imhoff, Samuel G.,	1019 Folsom.
Iredale, A. S. & C. W.,	862 Mission.
Judkins, E. H.,	2101 Mission.
Keating & May,	2205 Mission.
Keegan, James,	844 Washington.
Kilday Bros.,	1138 Howard.
Kingwell, James W.,	898 Dolores.
Kipp, John,	712 Larkin.
Lane, W. E.,	505 Kearny.
Lasswell, M. D.,	240 Minna.
Lawton, John J.,	507 Hayes.
Leipsig, Joseph,	1634 Pine.
Lempke, J.,	806 Mission.
Levy Bros.,	439 Bush.
Lowrie, John,	225 Golden Gate Av.
McCann, Nicholas,	6 Hayes.
McCarthy, Chas. P.,	1217 Fillmore.
McIntyre, Wm.,	246 Sutter.
McKewen, P. & Co.,	2 Turk.
McMillan & Winter,	138 7th.
McNally & Hawkins,	607 Market.
Marcy, Jules G.,	508½ Bush.
Mayer, Joseph,	47 3rd.
Miller, George,	510 Pine.
Mill, Andrew,	Railroad Av. bet. 15th & 16th Aves.
Milne & Gants,	119 Dupont.
Mocker & Newmark,	327 Turk.
Moenning, G.,	614 Octavia.
Monaghan, Thos. H.,	1314 Larkin.
Mower, A. H.,	334 16th.
O'Brien, Michael,	432 Geary.
O'Brien & Piggott,	2 6th.
O'Connor, Michael P.,	905 Larkin.
O'Shea, John J.,	1837 Ellis.
Packischer, Joseph,	2106 Fillmore.
Paris, Victor,	1810 Powell.
Peterson & Meyers,	1650 Polk.
Plagemann, John C.,	204 Powell.
Platz, J.,	2629 Pine.
Powers, E. J.,	1623 Post.
Prior, James K.,	1128 Market.
Raisch, Fred.,	144 11th.
Rehn, Chas.,	208 16th.
Reil, Lawrence,	cor. Railroad and 17th Aves.
Reiley, Chas. J.,	320 Montgomery Av.
Reynolds, W. H. Jr.,	1006 Dupont.
Rice, Richard,	107 Geary.
Roggio, John,	440 Broadway.
Ross, Thomas,	316 Bush.
Ruddock, James W.,	829 Sutter.
Rustemeyer, W. J.,	2325 Mission.
Shepard Bros.,	108 Leidersdorff.
Shuppert, A. L.,	1206 Pacific.
Smith, Timothy,	922 Larkin.
Smith, William,	21 Montgomery Av.
Snook, G. & E.,	630 Sacramento.
Sutherland & Gray,	230 Sutter.
Sweeney, M. M.,	102 Stockton.
Sweeney & Vance,	623 California.
Thomas, W. H.,	S. E. cor. 27th and Church.
Tripp, Geo. A.,	226 Fremont.
Wagner, John G.,	214 Montgomery Av.
Waters, Charles,	30 O'Farrell.
Waters & Dunne,	922 Larkin.
Weekes, William,	1525 Stockton.
Wempke, H. L.,	S. W. cor. Valencia and Hill.
Williamson, Henry,	329 Sutter.
Wilson, E. V.,	608 Larkin.
Wilson, James S.,	408 Hayes.
Wilson, Jno. T.,	Southern Pacific R. R.
Wilson, W. F.,	25 Stockton.
Wolff, Marcus,	226 1st.
Wood, C.,	203 7th.
Wyne, J. T.,	227 Fillmore.

## PLUMBERS' SUPPLIES, &amp;C.

Allen, W. R. &amp; Co., ..... 701 Market.

## SAN FRANCISCO—Continued.

American Pipe Co.,	324 Pine.
Arnold, N. S. & Co.,	310 California.
Asphalted Wrought Iron Pipe Co.,	32 Merchants Exchange.
Bush, David,	22 Post.
Day, Thomas,	122 Sutter.
Dunham, Carrigan & Co.,	107 Front.
Garlick, James O.,	329 Market.
Garratt, W. T.,	138 Fremont.
Gibbs, Geo. W. & Co.,	35 Fremont.
Holbrook, Merrill & Stetson,	225 Market.
Huntingdon, Hopkins & Co.,	Junction Bush and Market.
McNally & Hawkins,	607 Market.
Montague, W. W. & Co.,	110 Battery.
Prior, James K.,	1128 Market.
Rankin, Bravton & Co.,	127 1st.
Richards & Snow,	408 Market.
Roylance, J.,	45 Fremont.
Savage & Son,	135 Fremont.
Selby, Thos. H. & Co.,	116 California.
Tay, Geo. H. & Co.,	612 Battery.
Van Winkle, I. S. & Co.,	413 Market.
Williams, Dimond & Co.,	202 Market.

## MISCELLANEOUS.

Betts Spring Co.,	Car Springs.
218 Fremont.	
Buswell, W. F.,	Elevators.
223 Mission.	
Dixon Bros.,	Chain Mfrs.
N. W. cor. Iowa and Yuba.	
Dob'e, Abner,	File Mfr.
13 Fremont.	
Hinkle, Philip,	Elevators.
118 Main.	
Ills, J. G.,	Coppersmith.
814 Kearny.	
Kelley, Martin,	File Mfr.
305 Howard.	
Little & Lawson,	Coppersmith.
603 Battery.	
Mistre, S.,	Coppersmith.
811 Montgomery.	
Pacific Chain Works,	Chain Mfrs.
12 Front.	
Pacific Rolling Mill Co.,	16 1st.
Pacific Saw Mfg. Co.,	Mfrs. Files & Saws.
17 Fremont.	
Payne Bros.,	Bolts, Nuts, Chains, &c.
153 Beale.	
Perey, Pierre,	Coppersmith.
233 1st.	
Phelps Mfg. Co.,	Screws, Bolts, Chains, &c.
13 Drumm.	
Ridgway Bros.,	File Mfrs.
9 Hill.	
Sanders & Co.,	Coppersmiths.
421 Mission.	
Selby Smelting & Lead Co.,	416 Montgomery.
Sims, John B.,	Iron Door Mfr.
123 Beale.	
Smith, Chas. W.,	Coppersmith.
522 Davis.	
Tripp, G. A.,	Coppersmith.
226 Fremont.	
Wagner & Todd,	Coppersmiths.
565 Mission.	
Wilde, Peter & Co.,	File Mfrs.
218 Fremont.	
Williams, Diamond & Co.,	Car Wheels.
202 Market.	
Wolf, A.,	File Mfr.
1332 Columbia.	

## SAN JOSE.

Altman, F.,	Machinist & Founder.
Chaise, J. W.,	Brass Foundry.
Cockrill, J. C. & Co.,	Plumbers.
Concoran, J. C. & Co.,	Plumbers.
Enright, Joseph,	Machinist & Iron Founder.
Hagan, James,	Plumber.
Kuchenbeiser, F.,	Iron Worker.
Pfister, A.,	Iron & Steel.
Sheehan, F.,	Plumber.
Watkins, Joseph T.,	Machinist.

**SAN JOSE—Continued.**

Weisman, F. C.,.....Plumber.  
White, James F.,.....Machinist.

**SAN LEANDRO.**

Hale, H. A.,.....Plumber.  
San Leandro Plow Co.....Mfrs. Agl. Impts.

**SAN LUIS OBISPO.**

Pattison & Hanson,.....Plumbers.

**SAN MATEO.**

Weber, J. S.,.....Plumber.

**SAN RAFAEL.**

Donnelly, H. P.,.....Plumber.  
Kinsella, Richard,.....Plumber.  
Saunders & Jacobs,.....Plumbers.

**SANTA BARBARA.**

Meany, John,.....Plumber.

**SANTA CLARA.**

Davies, Edwin H.,.....Machinist.  
Menzel, Robert,.....Plumber.  
Morrison, Samuel,.....Plumber.  
Schmidlin, F.,.....Machinist.

**SANTA CRUZ.**

Amner, Thor.,.....Iron Foundry.  
Currier, F. R.,.....Plumber.  
England, W. P.,.....Machinist.  
Martin, W. H.,.....Iron Foundry.  
Rhodes, W. H.,.....Machinist.

**SANTA ROSA.**

Creighton, Thomas,.....Plumber.  
Shuttle, W. H.,.....Iron Foundry.

**SONOMA.**

Waters, James U.,.....Plumber.

**SONORA.**

Bother, Wm. Jr.,.....Plumber.  
Moore, W. K.,.....Coppersmith.  
Phelps, Shepard, & Cowie,.....Iron Foundry.

**STOCKTON.**

Austin Bros.,.....Iron & Plumbers Supplies.  
Brown, P. F.,.....Gas Fitter.  
Bowen, S. B.,.....Machinist.  
Crane, John,.....Iron Works.  
Farrington, Hyatt & Co.,.....Iron Foundry.  
Globe Iron Works,.....Iron Foundry.  
Hall, William,.....Plumber.  
Humphrey, T. G.,.....Mfr. Agl. Impts.  
Hussey, W. W.,.....Plumber & Gas Fitter.  
Kennedy & Miller,.....Iron & Steel.  
Lissenden, G.,.....Mfr. Agl. Impts.  
McGuffick, Wm.,.....Boiler Maker.  
Matteson & Williamson,.....Iron Foundry.  
Rowe, Robert,.....Plumber & Gas Fitter.  
Stockton Iron Works,.....Iron Foundry.

**SUTTER CREEK.**

Donnelly, D. & Co.,.....Iron Foundry.  
Knight & Co.,.....Iron Foundry.

**TRUCKEE.**

Whittaker, Henry,.....Machinist.

**VACAVILLE.**

Rooke, Carl,.....Plumber.

**WALNUT CREEK.**

Kirsch, Michael,.....Machinist.

**WATSONVILLE.**

Howard, J. A.,.....Machinist.

**WEAVERVILLE.**

Armstrong, J. J.,.....Machinist.

**WILLIAMS.**

Smith, J. G.,.....Iron Foundry.  
Smith, W. A.,.....Machinist.  
Williams Foundry & Machine Shop.

**WOODLAND.**

Shellenberger, C. & W. E.,.....Agricultural Imple-  
ments & Machinery.  
Shulte, H. F.,.....Iron Foundry.

**YREKA.**

Lawton & Skinner,.....Iron Foundry.

**COLORADO.****BLACK HAWK.**

Burtenshaw, Silas,.....Founder & Machinist.  
Stroehle, G.,.....Boiler Maker.

**BOULDER.**

Berlin & Co.,.....Plumbers.  
Develine, J. W. & Son,.....Iron Foundry.

**BUENA VISTA.**

Kemble, E. L.,.....Machinist.

**CANON CITY.**

Dunsmore, Samuel,.....Plumber.  
Johnson, W. K.,.....Plumber.

**CENTRAL CITY.**

Hendrie & Bolthoff, Mfg Co., ..Founders & Machin-  
ists.

**COLORADO SPRINGS.**

Bumstead & Gibbs,.....Plumbers.  
Converse, W. H. & Co.,.....Machinists.  
Drinkwater, J. H.,.....Plumber.  
Marston, J. L.,.....Plumber.  
Scott, Wm.,.....Plumber.

**CONEJOS.**

Myers & Son,.....Machinists.

**DENVER.**

Adams, B. C.,.....Machinery.  
Anderson, J. G. & Sons,.....Plumbers.  
Baker & Co.,.....Galvanized Iron Works.  
Barringer & Swank,.....Iron Foundry.  
Brand, Geo.,.....Sheet Iron Worker.  
Brown & Kiefer,.....Plumbers, Steam & Gas Fitters.  
Central Foundry,.....Iron Foundry.  
Chapman, Alex.,.....Machinist.  
Colorado Iron Works,.....Iron Foundry.  
Cox, Thomas & Son,.....Iron Foundry.  
Davis, John & Co.,.....Plumbers.  
Davis, Cresswell & Co.,.....Steam Fitters.  
Day & Diercks,.....Copper & Sheet Iron.  
Denver Foundry and Machine Co.  
Denver Iron Fence Co.  
Denver Rolling Mill,.....Mfrs Iron.  
Dibble, A.,.....Machinist.  
Fallon, J. M.,.....Plumber.  
Fischer, Herman,.....Gas & Steam Fitter.  
Fleming, H. W. & Co.,.....Plumbers.  
Fryer & Stanley,.....Plumbers.  
Gaff & Saulttry,.....Plumbers.  
Garry, John,.....Brass Works.  
Glendenning & Maynard,.....Iron Foundry.  
Hendey & Meyer,.....Machinists.  
Hendrie & Bolthoff, Mfg Co., Founders and  
Machinists.  
Hinman, Chas. E.,.....Brass Foundry.  
Holme & White,.....Plumbers & Gas Fitters.  
Holzer & Abey,.....Machinists.  
Hughes, T. P.,.....Plumber.  
Jackson, James W.,.....Founder & Machinist.  
Jensen, Bliss & Co.,.....Iron & Steel.  
Johnson & Co.,.....Plumbers & Gas Fitters.  
Kabisins & Gagne,.....Gas Fitters.  
Kellogg, E. L.,.....Ironworker.  
Kelly, James,.....Plumber & Gas Fitter.  
Kennedy, C. E.,.....Plumbers' Supplies.  
Kennedy, H. U.,.....Plumber.  
Kinsey, W. J.,.....Mining Machinery.  
Kloer, Hugh A.,.....Machinist.  
Lacy & Co.,.....Iron Foundry.  
Lawson & Co.,.....Plumbers & Gas Fitters.

**DENVER.—Continued.**

Lees, Thomas.....Plumber & Gas Fitter.  
 McFarland & Haas.....Galvanized Iron Works.  
 McIntyre, M.....Plumber.  
 Marsh, W. H. & Co.....Metal Workers.  
 Marsh & Keller.....Foundry.  
 Novelty Manufacturing Co.....Brass & Iron Works.  
 Pelleuz, Begg & Co.....Plumbers.  
 Reuterman, H. T.....Machinist.  
 Runkle & Wich.....Sheet Iron Works.  
 Sample, N. W.....Denver & Rio Grande R. R.  
 Seibel, Gus. A.....Copper & Sheet Iron Works.  
 Shaw & Roche.....Boilermakers.  
 Swain, H.....Machinist & Founder.  
 Trenwith, E. J.....Plumber.  
 Tritch, George.....Iron & Steel.  
 Walker, Thos. C.....Founder & Machinist.  
 Walker & Co.....Foundry.  
 Ward & Nolan.....Plumbers & Gas Fitters.  
 Young & Schram.....Sheet Iron Workers.

**EMPIRE CITY.**

Van Antwerp, Geo.....Machinist.

**FORT COLLINS.**

Garbe & Reischenberg.. Founders & Machinists.

**GEORGETOWN.**

Union Manufacturing Co. Founders & Machinists.

**GOLDEN.**

Cramer & Lake.....Plumbers.  
 Golden Wood & Iron Works.....Iron Foundry.  
 Lanius, Paul & Co.....Plumbers.  
 Moynahan, T. J.....Plumber.  
 Parker, J. H.....Plumber.  
 Robig, J. V.....Plumber.

**IDAHO SPRINGS.**

Monroe, W. C.....Machinery.  
 Patten, Geo. A. & Co.....Plumbers.

**LEADVILLE.**

Alfield, John.....Machinist.  
 Carry, John S.....Machinist.  
 Colorado Iron Works.....Foundry.  
 Cory, R. J.....Machinist.  
 Englebach & Co.....Iron Works.  
 Fairfield, J. W.....Machinery.  
 Falkenan, A. & Co.....Machinists.  
 Farrow, Jno. A.....Boilermakers and Milling Machinery.  
 Gay, Frank.....Machinist & Founder.  
 Griswold, W. & Co.....Plumbers.  
 Harsh & Cary.....Mining Machinery.  
 Keeler, W. S.....Machinist.  
 Manville & Co.....Machinists.  
 Moynahan, F. J.....Plumber.  
 Neep & Pfisterer.....Machinists.  
 O'Brien & Hawkins.....Plumbers.  
 Pacific Iron Works.....Iron Foundry.  
 Penberthy, Wm.....Machinist.  
 Rhine, H.....Plumber.  
 Roby, J. V.....Machinist.  
 Union Manufacturing Co Founders & Machinists.  
 Walker Bros.....Machinists.

**LONGMONT.**

Lincoln, J.....Machinist.

**PUEBLO.**

Bennett, J. H. & Co.....Plumbers.  
 Francis, H. R. & Co.....Plumbers.  
 Free, M. A. & Son.....Plumbers.  
 Lannon, Geo. W. & Co.....Founders & Machinists.  
 Mitchell, Douglass.....Plumber.  
 Quinlan, P. H.....Plumber.  
 Wood, Charles.....Gasfitter.

**ROBINSON.**

Manner, M.....Machinist.

**ROSITA.**

Verkonteren, A. J.....Machinery.

**SILVER CLIFF.**

Dubbs & Ebert.....Plumbers.  
 Falkman, A.....Iron Foundry.  
 Robbins, Minno & Co.....Plumbers.

**SOUTH PUEBLO.**

Flemming, J. & Co.....Plumbers.  
 Francis, H. R. & Co.....Plumbers.  
 South Pueblo Machine Co.....

**TRINIDAD.**

Campbell, R. B.....Machinist.  
 Chappell, D. A.....Gasfitter.

**CONNECTICUT.****ANSONIA.**

Ansonia Brass & Copper Co.....Mfrs Brass.  
 Blackman, W. B. & Co.....Plumbers.  
 Briggs, Geo. W.....Mfr Brass Butts & Hinges.  
 Carter, Edward.....Brass Foundry.  
 Clemens Foundry & Machine Co.  
 Cook Foundry Co.....Brass Founders.  
 Cook, Henry C.....Machinist.  
 Derby Bit Co.....Mfrs Bits.  
 Farrell Foundry & Machine Co.  
 Goodman, B.....Mfr Brass Goods.  
 Meeham, P. L.....Plumber.  
 Osborne & Cheeseman Co.....Mfrs Brass.  
 Reynolds, Frank J.....Plumber.  
 Schneller, Geo. O.....Mfr. Brass Goods.  
 Sperry Mfg. Co.....Mfrs. Carriage Hardware.  
 Terry, T. P.....Plumber.  
 Thomas, Charles.....Mfr. Files.  
 Wallace & Sons.....Mfrs Brass.

**BIRMINGHAM.**

Bassett, D. M.....Mfr Bolts.  
 Birmingham Iron Foundry Co.....Machinists.  
 Birmingham Screw Co.....Mfrs. Screws.  
 Derby Silver Co.....Mfrs. Britannia Ware.  
 Excelsior Mfg Co.....Mfrs. Augers.  
 Kelly, Dennis H.....Plumber.  
 Otis, S. L.....Machinist.  
 Peck, E. W.....Plumber.  
 Peck, Stow & Wilcox Co.....Mfrs. Hardware.  
 Shelton Co., The.....Mfrs. Bolts, Tacks & Nails.  
 Shelton Foundry Co.....Brass & Iron Castings.  
 Whitlock, John.....Machinist.  
 Whitlock, Sturgis.....Machinist.  
 Wilcox & Howe.....Mfrs. Carriage Hardware.

**BLOOMFIELD.**

Burr, Jerome.....Machinist.

**BOLTON.**

Alvord, E. D.....Machinist.  
 Gilbert, J.....Machinist.  
 Loomis, E. J.....Machinist.

**BRANFORD.**

Brantford Lock Works.....Mfrs Locks.  
 Malleable Iron Fittings Co.  
 Parkerton, L.....Machinist.  
 Smith & Egge Mfg Co.....Mfrs Locks.  
 Thumshirn, Geo.....Machinist.

**BRIDGEPORT.****MACHINISTS.**

Alvord, W. J.....Howe Sewing Machine Co.  
 Beers, P. M.....House, Henry A.  
 Belknap Mfgo.....Laws, A. D.  
 Bridgeport Machine Leonard & Silliman.  
 Tool Co.....Parsons & London.  
 Coulter & McKenzie. Secor, J. B.  
 Machine Co.....Walter Bros.  
 Eames, Horace L.....Wheeler & Wilson Mfg Co.  
 Fitzpatrick, M. E.....Wright, John H.  
 Follansbee, J. S.....Yates & Underhill.  
 Hotchkiss, Joseph.....

**BRIDGEPORT—Continued.****PLUMBERS, STEAM & GASFITTERS.**

Atwood, E. W. & Co. Goodsell, Zalmon.  
 Brady, J. F. Hopkins, Alfred.  
 Bristol, Walter B. Lynch, P. J. & Co.  
 Burke, M. W. Middlebrook, H. B.  
 Cornwall, Timothy. Mills, L. H.  
 Fox & Riley. Stockwell, G. P. & Co.

**MISCELLANEOUS.**

Acme Shear Co. Mfrs. Shears.  
 Aetna Spring & Axle Co. Mfrs.  
 American Belt, Tin & Tube Co.  
 Armstrong, F. Plumbers' Tools.  
 Belknap Mfg. Co. Mfrs. Brass Goods.  
 Bartram, O. Iron & Steel.  
 Bridgeport Brass Co. Mfrs. Brass.  
 Bridgeport Hydraulic Co.  
 Bridgeport Malleable Iron Co.  
 Bridgeport Gun Implement Co.  
 Bridgeport Spring Co. Mfrs. Springs.  
 Bridgeport Steel Works. Mfrs. Steel.  
 Brittin & Ellin Cutlery Co. Mfrs. Cutlery.  
 Cornell & Patterson Mfrg. Co. Mfrs. Hardware.  
 Douglas, Geo. Mfr. Springs.  
 Eaton, Cole & Burnham Co. Brass Works.  
 Elwell Hardware Co. Mfrs. Hdw.  
 Farist Steel Works. Mfrs. Steel.  
 Fox & Rand. Plumbers' Supplies.  
 Frary Cutlery Co. Mfrs. Cutlery.  
 Fray, John S. Mfr. Scales.  
 Giles & Clancy. Iron Foundry.  
 Glover, Chas. T. Iron Fittings.  
 Hamilton, John. Brass Founder.  
 Hill & Jennings. Mfrs. Agricultural Implements.  
 Hobbs, Geo. E. Iron & Steel.  
 Hogan & Barry. Mfrs. Files.  
 Hotchkiss' Sons. Mfrs. Hardware.  
 Huggard, Joseph. Mfr. Files.  
 Jeffers, W. & Co. Fire-Engine B'd'rs.  
 Lowe & Watson. Boiler Makers.  
 Monumental Bronze Co., The. Mfrs. Bronze Goods.  
 Parsons & Ellis. Mfrs. Files.  
 Parsons & Landon. Iron Founders.  
 Renz Hardware Co. Mfrs. Shears.  
 Skidmore, P. H. Sons. Boiler Makers.  
 Spring Perch Co. Mfrs. Springs.  
 Sterling's, Sherwood, Sons. Iron & Steel.  
 Tomlinson, R. Spring & Axle Works.  
 Smith & Egge Mfg. Co. Mfrs. Locks.  
 Watson, James, Jr. Iron Foundry.

**BRISTOL.**

Andrews, C. E. Mfrs. Augers.  
 Barner, Wallace. Mfr. Springs.  
 Bristol Brass & Clock Co.  
 Clayton, Wm. & Sons. Mfrs. Cutlery.  
 Dunbar Bros. Mfrs. Springs.  
 Goodenough, L. Brass Foundry.  
 National Water Wheel Co.  
 Penfield, E. O. & Co. Mfrs. Saws.  
 Seasons Foundry Co.  
 Skelly, J. W. Plumber.  
 Turner, Geo. Mfr. Cutlery.  
 Winslow & Atkins. Machinery.

**BROOKFIELD.**

Bennett & Wetmore. Mfrs. Shears.

**BURLINGTON.**

Ford, Omri C. Machinist.  
 Wilkinson, H. Mfr. Shears.

**CANNON'S STATION.**

Lockwood, D. & J. & Co. Brass Works.

**CENTERBROOK.**

Connecticut Valley Mfg Co. Mfrs. Bits.

**CHESHIRE.**

Cheshire Brass Co. Rolling Mill.  
 Peck, Stowe & Wilcox Co. Mfrs. Tools.

**CHESTER.**

Clark, L. C. Machinist.  
 Connecticut Valley H'dware Co. Mfrs. Auger Bits.  
 Denae, A. H. & J. S. Mfrs. Gimlets.  
 Gaylord, L. J. Mfr. Gimlets.  
 Griswold, C. L. Mfr. Bits.  
 Jennings, Russell. Mfr. Augers.

**CHESTER.—Continued.**

L'Hommedieu, Eugene. Machinist.  
 Mix, J. W. & Co. Mfrs. Tools.  
 Root, L. C. Machinist.

**CLINTONVILLE STATION.**

Carr & Hobson. Mfrs. Agricultural Implements.

**COLCHESTER.**

Apes, G. Machinist.  
 Burns, Michael. Machinist.  
 Zillette & Greer. Machinists.

**COLLINSVILLE.**

Collins Co. The. Mfrs. Agricultural Implements.

**CORNWALL RIDGE.**

Cornwall Ridge Iron Co.  
 Parrent, Nicholas. Machinist.

**CROMWELL.**

Allison, J. D. Mfr. Hammers.  
 Stevens, J. & E. Co. Mfrs. Hardware.  
 Warners & Noble. Mfrs. Hammers.

**DANBURY.**

Belden, R. A. & Co. Machinists.  
 Fanton Bros. Iron Foundry.  
 Hull, F. A. & Co. Mfrs. Drill Chucks.  
 Newman, S. T. Machinist.  
 Nutt, Joseph. Machinist.  
 Read, Willis. Mfr. Water Wheels.  
 Reid, Chas. H. Machinist.  
 Stevens, Turner & Co. Machinists.

**DEEP RIVER.**

Doane, C. W. Machinist.  
 Jennings, Russell. Mfr. Bits.

**EAST BERLIN.**

Corrugated Metal Co.

**EAST CANAAN.**

Barnum, Richardson Co. The. Iron Foundry.

**EAST HADDAM.**

Bunce, Jared. Machinist.

**EAST HAMPTON.**

Abbe, Horatio H. Machinist.  
 Barton Bell Co. Mfrs. Bell.  
 Bevin Bros. Mfg Co. Mfrs. Bells.  
 Brown, H. B. Machinist.  
 Butler & Arthur. Mfrs. Bells.  
 Ea t Hampton Bell Co. Mfrs. Bells.  
 Gong Bell Mfg Co. Mfrs. Bells.  
 Nichells, Wm. Machinist.  
 Starr Bros. Bell Co. Mfrs. Bells.  
 Veazey & White. Mfrs. Bells.  
 Watrous, D. W. & Co. Mfrs. Bells.

**EAST HARTFORD.**

Comstock Bros. Mfrs. Agricultural Implements.

**EASTON.**

Jennings, Chas. Mfr. Agricultural Implements.

**ESSEX.**

Redfield, J. E. Mfr. Water Wheels, Taps, Dies, &c.

**FALLS VILLAGE.**

Gibbs, J. W. Machinist.  
 Slingland, N. Housatonic R R

**FORESTVILLE.**

Andrews, C. E. Mfr. Bits & Augers.

**GAYLORDSVILLE.**

Talbot, Wm. Iron Foundry.

**GLASTONBURY.**

Goslee, O. W. Mfr. Agricultural Implements.

**GRANBY.**

Crystal Cutlery Co. Mfrs.

**GREENVILLE.**

Barrows, Henry A. Iron.  
 Gilmour Bros. Iron Foundry.  
 Newton, J. M. & Bro. Machine Screws.



**GREENWICH.**

Pettee, Ayres & Davenport,.....Iron Works.  
Talbot, Wm.,.....Plumber.  
Wilcox, Josiah & Co.,.....Mfrs. Tools.

**GUILFORD.**

Spencer's, J. S. Sons,..... Founders & Mfrs. Scales.

**GURLEYVILLE.**

Parker, Hiram,.....Mfr. Forgings & Dies.

**HAMDEN.**

Ives, W. A. & Co.,.....Mfrs Augers & Bits.

**HARTFORD.****MACHINISTS.**

Babcock, N. L.	Lincoln, Geo. S. & Co.
Billings & Spencer Co.	Losty, John
Cook, Asa S.	New York Sewing Ma-
Cushman, A. F.	chine Co.
Eddy, Arthur H.	Pratt & Whitney Co.
Hartford Iron Works.	Sawtelle & Judd.
Hartford Machine Screw	Slate, Dwight.
Co.	Tiffany, Lucian & Co.
Jackson & Gleason.	Weed Sew'g Mach. Co.

**PLUMBERS, STEAM AND GAS FITTERS.**

Ahearn, James.	Jones, Thos. S.
Barnes, J. B.	Keller & Boyle.
Bergen, J. P.	Kenney, Luther & Co.
Birch & Co. Plumbing	Kelsey, O. S.
Corporation.	Kennedy, W. P.
Boyle, D. F. & Co.	Kenney, Francis W.
Brennan, Michael.	Lawler, Edward.
Clapp, C. C.	Leitch & Pratt.
Cowles, L. W. & Co.	Maehl, George.
Cullen, Michael.	Moore, David J.
Garvie, Robert.	Moore, Thomas W.
Golden, M. & C.	Oakes, Thos.
Hartfo'd Sanit'y Plumb-	Pratt, H. B. & Co.
ing Co.	Robinson, George.
Hogan, M.	Smith, John.
Jones, Joseph.	Trumbull, E. P.

**MISCELLANEOUS.**

Atlantic Screw Works.....  
Armerman, P.,.....Boiler Maker.  
Bailey L. & Co.,.....Mfrs. Hardware.  
Beach, H. R. & Son,.....Boiler Makers.  
Benham, Nathan,.....Machinery.  
Blake, Thos. J.,.....Copper Foundry.  
Blodgett & Clapp Co.,.....Iron & Steel.  
Bosworth, N. A.,.....Steam Heating.  
Chemical Fibre Engine Co.  
Colt's Patent Firearms Co.  
Connecticut Screw Co.  
Cowlinson, Henry,.....Mfr. Cutlery.  
Cushman, Dwight,.....Mfr. Water Wheels.  
Cusick, E. J.,.....Brass Foundry.  
Davis, J. B. & Son,.....Mfrs. Pumps & Heaters.  
Ensworth, Lester L.,.....Iron & Steel.  
Gatlin Gun Co.,.....Mfrs. Fire-Arms.  
Hartford Engineer'g Co., Mfrs. Station'y Engines.  
Hartford Compressed Air Pump Co.  
Hartford Machine Screw Co.  
Hartford Hammer Co.  
Hartford Sanitary Plumbing Co.  
Hill's Archimedean Lawn-Mower Co.  
Howard, James L. & Co.,.....Railroad Supplies.  
Novelty Belt Hook Co.,.....Mfrs. Belt Hooks, etc.  
Overman Wheel Co.,.....Mfrs. Tricycles.  
Pitkin Bros. & Co.,.....Steam Hydraulic Works.  
Pratt & Cady Co.,.....Mfrs. Steam Governors.  
Pratt & Candee,.....Cast Steel & Machinists' Sup'lies.  
Rogers, Wm., Mfg Co.,.....Mfrs. Cutlery.  
Seymour, Chas. & Co.,.....Iron, &c.  
Smith, Robert H.,.....Mfr. Files.  
Steam Boiler Appliance Co.  
Vittur, D.,.....Mfr. Cutlery.  
Washburn Car-Wheel Co.

**HIGGANUM.**

Chase, Reed & Co.,.....Mfrs. Hardware.  
Higganum Mfg Co.,.....Founders.  
Stevens & Hubbard Mfg Co.,.....Machinists.

**HUNTINGTON.**

Nettleton, Charles P.,.....Plumber.  
Spencer, Z.,.....Machinist.

**HUNTSVILLE.**

Hunt's, Lyman, Iron Co.,.....Iron Foundry.

**KILLINGWORTH.**

Brewer, John,.....Machinist.

**LAKEVILLE.**

Holly Mfg. Co.,.....Mfrs. Cutlery & Hardware.  
Reed, Alfred E.,.....Gray Iron Castings.

**LIME ROCK.**

Gilmore, P. P.,.....Iron Castings.  
Harvey Mfg Co.,.....Bolts & Nuts.  
Lime Rock Iron Co.,.....Mfrs. Iron.

**LITCHFIELD.**

Allen, C. M.,.....Machinist.

**MADISON.**

Johnson, A. R.,.....Machinist.

**MANSFIELD CENTRE.**

Crain, Geo. M.,.....Machinist.

**MARION.**

Frost, Levi D.,.....Bolts, &c.

**MERIDEN.**

Beecher Mfg. Co.,.....Mfrs Carriage Hardware.  
Bradley & Hubbard Mfg. Co.,.....Mfrs. Brass Goods.  
Breckenridge & Co.,.....Iron Founders.  
Cook, J. & Co.,.....Mfrs. Presses.  
Duncan, Alexander,.....Plumber.  
Foster, Merriam & Co.,.....Mfrs. Hardware.  
Gladwin, R. S.,.....Mfr. Shears.  
Griswold, Richmond & Glock,.....Mfrs. Hardware.  
Kay, James T.,.....Plumber.  
Kelsey, W. A. & Co.,.....Mfrs. Printing Presses.  
Manning, Bowman & Co.,.....Mfrs. Britannia Ware.  
McCormick & Cashen,.....Gas Fitters.  
Meriden Britannia Co.,.....Mfrs. Britannia Ware.  
Meriden Cutlery Co.,.....Mfrs. Cutlery.  
Meriden Malleable Iron Co.  
Meriden Silver Plate Co.  
Merriam, A. H.,.....Machinist.  
Miller, G. W.,.....Mfr. Cutlery.  
Miller Bros. Cutlery Co.,.....Mfrs. Cutlery.  
Miller, E. & Co.,.....Mfrs. Sheet & Cast Brass.  
Parker, Chas. Co. The,.....Iron Founders.  
Parker Bros.,.....Mfrs. Fire-Arms.  
Parker & Whipple Co.,.....Mfrs. Locks.  
Rogers, C. & Bro.,.....Mfrs. Silver-Plated Ware.  
Rogers, Smith & Co.,.....Mfrs. Silver-Plated Ware.  
Wheeler, F. J.,.....Mfr. Stoves.  
Wilcox Silver-Plate Co.

**MIDDLEBURY.**

Regan, Joseph,.....Mfr. Files.  
Sears, H., Mfg. Co.,.....Mfrs. Cutlery.  
Waterbury Knife Co.,.....Mfrs. Cutlery.

**MIDDLEFIELD.**

Gouch, John O.,.....Machinist.  
Lyman, Wm.,.....Machinist.  
Metropolitan Mfg. Co.,.....Foundry.  
Smith, Otis A.,.....Mfr. Pistols.

**MIDDLE HADDAM.**

Keighly, Wm.,.....Castings.

**MIDDLETOWN.**

Bailey, J. S. & Son,.....Plumbers.  
Brown, Wm.,.....Brass Founder.  
Brownlow, D. R.,.....Plumber.  
Donahue Bros.,.....Mfrs. Shears.  
Douglas, W. & B.,.....Mfrs. Pumps.  
Globe Mfg. Co.,.....Mfrs. Tools.  
Hale, Carlos,.....Plumber.  
Hale & Donovan,.....Plumbers.

**MIDDLETOWN—Continued.**

Hall Bros. .... Mfrs. Files.  
 Hart & Co. .... Mfrs. Shears.  
 Hedges Hardware Co. .... Mfrs. Hardware.  
 Henshaw, J. R. .... Mfr. Iron Railings.  
 Hotchkiss, Fred. .... Malleable Iron.  
 Matthews, L. J. .... Mfr. Britannia Ware.  
 Middletown Plate Co. .... Mfrs. Britannia Ware.  
 Miles, W. C. .... Mfr. Hardware.  
 Palmer Tentering Machine Co.  
 Singleton, S. S. .... Machinist.  
 Smith, Otis A. .... Mfr. Fire-Arms.  
 Smith (The) Lock Nut Co. ....  
 Stiles & Parker Press Co. .... Mfrs. Presses  
 Van Sande, Geo. & Co. .... Machinists.  
 Victor Sewing Machine Co. .... Mfrs.  
 Wilcox, Wm., Mfg Co. .... Mfrs. Wrought Iron Plate.  
 Wilcox, Crittenden & Co. .... Mfrs. Hardware.

**MILFORD.**

Straw Sewing Machine Co. .... Mfrs.

**MILDALE.**

Clark Bros. & Co. .... Bolts & Nuts.

**MILTON.**

Hinchcliffe, Thomas, .... Mfr. Shears

**MOODUS.**

Chapman, S. N. .... Machine Forging.  
 Moodus Machine Co. .... Machinists.  
 Spencer J. .... Machinist.  
 Spencer, J. E. .... Machinery.

**MORRIS.**

Emmons, Geo. E. .... Mfr. Scythe Rifles.

**MOUNT CARMEL.**

Ives, Woodruff & Co. .... Mfrs. Carriage Hardware.  
 Mount Carmel Bolt Co. .... Mfrs. Bolts.

**MYSTIC.**

Watrous & Bacon, .... Machinists.

**MYSTIC RIVER.**

Standard Machinery Co. .... Mfrs. Tools

**NAUBUC.**

Williams Bros. .... Mfrs. Cutlery.

**NAUGATUCK.**

Gifford Mfg Co. .... Mfrs. Cutlery.  
 Naugatuck Cutlery Co. .... Mfrs. Cutlery.  
 Naugatuck Machine Co. .... Machinists.  
 Sheehy, William, .... Plumber.  
 Treat, Robert M. .... Mfr. Agricultural Implements.  
 Tuttle Mfg Co. .... Mfrs. Agricultural Implements.  
 Ward, L. & W. .... Mfrs. Brass.  
 Webster, J. F. & W. L. .... Mfrs. Shears.

**NEW BRITAIN.**

Austin, Moses S. .... Gas Fitter & Plumber.  
 Beaton Bros. .... Gas Fitters & Plumbers.  
 Brady, Thos. H. .... Plumber.  
 Chambers, Moses, .... Mfr. Files.  
 Corbin, P. & F. .... Mfrs. Hardware.  
 Francis Mfg Co. .... Mfrs. Hardware.  
 Humason & Beckley Mfg Co. .... Mfrs. Hardware.  
 Kemp-hall Mfg. Co. .... Mfrs. Locks.  
 Landers, Frary & Clark, .... Mfrs. Brass & Cutlery.  
 McCabe, W. F. .... Plumber.  
 Malleable Iron Works.  
 Miles & Beard, .... Plumbers & Steam Fitters.  
 Page, William, .... Plumbers.  
 Russell & Erwin Mfg Co. .... Mfrs. Hardware.  
 Stanley Works, .... Mfrs. Hinges & Bolts.  
 Taylor Mfg Co. .... Mfrs. Hardware.  
 Turnbull & Swanston, .... Mfrs. Hardware.  
 Union Mfg Co. .... Founders & Machinists.  
 Vulcan Iron Works, .... Gray Iron Castings.

**NEW CANAAN.**

Messenger, R. .... Machinist.  
 Perfection (The) Scale Co. .... Mfrs.  
 Tourneer, James W. .... Plumber.

**NEW HARTFORD.**

Hungerford, O. T. .... Machinist.

**NEW HAVEN.****MACHINISTS.**

Adt, John. ....  
 Barnes, E. F. & G. A. .... Mower, Samuel E.  
 Beecher & Peck. .... National Manufacturing  
 Beers, James M., .... Co.  
 Bigelow, H. B. & Co. .... New Haven Mfg Co.  
 Buttricks, F. D. .... Pardee, W. B.  
 Evarts, Curtis F. .... Pfeleghar, F. P.  
 Frisbie, D. & Co. .... Rowland, F. C. & A. E.  
 Gaynor & Fitzgerald. .... Smith, Hobart E.  
 Godwin, W. C. .... Smith & Krah.  
 Griswold, Geo. M. .... Sweetland & Co.  
 Harrison, H. .... Thompson, Hy. G. & Son.  
 Hatch, A. & Co. .... Twist, N. W.  
 Herrick & Cowell. .... Wetmore Machine Co.

**PLUMBERS, STEAM AND GAS FITTERS.**

Arnold E. & Co. .... Howarth, W. S.  
 Beardsley & Story. .... Howland, Elihu.  
 Buckley & Kelly. .... Keane, Wm.  
 Cameron, W. T. & Co. .... Kelly, Daniel F.  
 Clerkin & McDonald. .... Morgan, Robert.  
 Colby, James. .... Munson, Bishop & Gil-  
 Cooney, Patrick. .... bert.  
 Corbett, I. W. & Co. .... New Haven Steam Heat-  
 Edmondson, A. & G. .... ing Co.  
 Eldridge, John. .... O'Meara, Wm.  
 Englehardt, W. .... Quigley, John J.  
 Evans, Evan. .... Reynolds, F. J.  
 Fo-kett & Bishop. .... Rockwell, D. F.  
 Garlock, John R. .... Scott, M. B.  
 Gunning & Malia. .... St. John, Henry & Co.  
 Herbert, Walter T. .... Warner & Bristol.  
 Williams, Hubbard.

**MISCELLANEOUS.**

Automatic Boiler & Engine Co.  
 Auxiliary Rifle Barrel Co.  
 Ball, A. A. .... Mfr. Iron Railings.  
 Barnes Mfg Co. .... Mfrs. Locks.  
 Barnum & Root, .... Mfrs. Iron Railings.  
 Blake Crusher Co.  
 Bradnack, J. J. & Co. .... Mfrs. Bolts.  
 Brown, H. B. & Co. .... Mfrs. Bolts & Nuts.  
 Bushnell, S. S. .... Mfr. Iron Staples.  
 Chambers, Henry, .... Mfr. Files.  
 Clark, F. E. .... Mfr. Augers.  
 Darling & Newell, .... Mfrs. Tools.  
 Dart, A. A. Co. The, .... Mfrs. Springs.  
 Ensign Wooster A. & Son, .... Iron & Steel.  
 Fitch, W. & E. T. .... Mfrs. Springs.  
 Flannegan, Matthew, .... Mfr. Files.  
 Graham, Jas. & Co. .... Brass Founders.  
 Grille Co. The, .... Mfrs. Screws.  
 Halfinger, A. .... Mfr. Cutlery.  
 Hall, Chas. D. .... Shipsmith.  
 Hill, A. M. .... Brass Founder.  
 Hopson, John M. .... Machinery.  
 Howard, C. A. .... Mfr. Brass Cocks.  
 Ives, Wm. A. & Co. .... Mfrs. Augers, &c.  
 Jepson, Wm. .... Mfr. Files.  
 Johnson, S. C. & Co. .... Iron Works.  
 McLagon & Co. .... Iron Foundry.  
 Mallory, Wheeler & Co., .... Mfrs. Locks.  
 Marlin, John M. .... Mfr. Fire Arms.  
 Mersick, C. S. & Co. .... Iron & Steel.  
 Morris, Eli, .... Mfr. Saws.  
 New England Gas Mch Co. .... Mfrs.  
 New Haven Rolling Mill Co.  
 New Haven Spring Co. .... Mfrs. Springs.  
 O'Brien Mfg. Co. .... Mfrs. Hardware.  
 Page, Geo. .... Mfr. Locks.  
 Peck Bros. & Co. .... Mfrs. Brass Faucets.  
 Pendergast, James, .... Mfr. Iron Steps.  
 Pierpoint, C. & Co. .... Mfrs. Agl. Impls.  
 Rawson, James, .... Mfr. Cutlery.  
 Reynolds, Jas., .... Brass Founder.  
 Reynolds & Co., .... Nuts, Screws, &c.

**NEW HAVEN—Continued.**

Richardson, John..... Mfr. Locks.  
 Schollhorn & Tiesing M'fg Co..... Mfrs. Scissors.  
 Seward, Moses & Son..... Mfrs Carriage Iron Work.  
 Spargo, E. & J..... Tool Makers.  
 Stannard, E. & Son..... Iron Foundry.  
 Thompson & Co..... Mfrs. Safes.  
 Todd, Alson..... Mfr. Springs.  
 Warner, G. F. Mfg Co..... Malleable Iron.  
 Waters' Patent Heater Co..... Mfrs Heaters.  
 Wheeler, E. S. & Co..... Iron & Metals.  
 Whitney Arms Co..... Mfrs. Fire Arms.  
 Wilson, Robert..... Mfr. Iron Railings.  
 Winchester Repeating Arms Co..... Mfrs. Fire Arms.  
 Yale Mfg. Co..... Mfrs Safes.

**NEWINGTON.**

Francis, Robert..... Machinist.  
 Tracy, Thomas..... Machinist.

**NEW LONDON.**

Albertson & Douglass Machine Co.  
 Brown Cotton Gin Co.  
 Douglass, J. D..... Cast Steel Sledges & Hammers.  
 Goss, Franklin..... Gas Fitter & Plumber.  
 Griffin, Peter..... Plumber.  
 Hillier & Mallory..... Plumbers.  
 Hoxie, Perry & Co..... Machinists.  
 Lee, John..... Shipemith.  
 Livesay Mfg. Co..... Iron Sheaves.  
 McCormick, J. H..... Boiler Maker.  
 McGuire, Thos..... Plumber.  
 Newman & Cronin..... Plumbers.  
 Russell, P. W..... Plumber.  
 Wilson Mfg. Co..... Mfrs. Hardware.

**NEW MILFORD.**

Anthony & McMahon..... Plumbers.  
 Barlow, D. A..... Plumber.  
 Marsh Bros..... Mfrs. Plows & Castings.  
 Northrup, Jasper A..... Iron Foundry.

**NORTHFIELD.**

Northfield Knife Co..... Mfrs. Cutlery.

**NORFOLK.**

Hartford Spring & Axle Co.  
 Norfolk Shear Co..... Mfrs.  
 Ryals & Beardsley..... Mfrs. Shears.

**NORTHFORD.**

Bartholomew, F. C. & I. H..... Mfrs. Bolts & Nuts.  
 Northford Rivet Co..... Mfrs. Rivets.

**• NORTH HAVEN.**

Carr & Hobson..... Iron Foundry.

**NORTH STONINGTON.**

Nicholas, David W..... Machinist.

**NORTH WINDHAM.**

Hartson, L. M..... Machinery.

**NORWALK.**

Arnold & Co..... Iron Foundry.  
 Austin, N. L..... Iron Foundry.  
 Burritt, C. W..... Plumber & Gas Fitter.  
 Cotter, John..... Machinist.  
 Glover, Edwin..... Plumber.  
 McKeown, Francis, Jr..... Plumber.  
 Norwalk (The) Lawn Mower Co.,  
 Olmstead, S. E. & Co..... Iron Foundry.  
 Simonds Mfg Co..... Iron Foundry.  
 Smith, W. H. & Co..... Iron & Steel.

**NORWICH.**

Bacon Arms Co..... Mfrs. Fire Arms.  
 Barber, J. E. & Co..... Machinists.  
 Bard, Geo. F..... Brass Foundry.  
 Bennett, D. H..... Mfr. Files.  
 Brown, Robert..... Steam & Gas Pipes.  
 Butts, H. L..... Mfr. Files.  
 Case & Fuller..... Iron. &c.  
 Chelsea File Works..... Mfrs. Files.  
 Colborn, R..... Norwich & Worcester R. R.  
 Collins, Jas. P. & Co..... Machinists.

**NORWICH—Continued.**

Converse, Albert T..... Iron & Steel.  
 Cranston, J. H..... Mfr. Printing Presses.  
 Drummond, Thomas..... Boiler-maker.  
 Hall, Benj..... Machinist.  
 Hopkins & Allen M'fg Co..... Mfrs. Pistols.  
 Hood Fire Arms Co..... Mfrs. Fire Arms.  
 Lester & Wasley..... Machinists.  
 Mitchell Bros & Co..... Rolling Mill.  
 Norwich Falls Pistol Co..... Mfrs. Pistols.  
 Norwich File Co.  
 Norwich Lock Mfg. Co..... Mfrs. Locks.  
 New England Sulky Plow Co..... Mfrs. Plows.  
 Osgood Gun Works..... Mfrs. Fire Arms.  
 Raughtigan, M..... Machinist.  
 Richmond Stove Co..... Foundry.  
 Roath, H. Hobart..... Iron Foundry.  
 Rogers, C. B. & Co..... Mfrs. Wood Working Machinery.  
 Rose, P. & G. C..... Machinists.  
 Ryan, Thos E..... Mfr. Fire Arms.  
 Sears, Myron..... Plumber.  
 Sibley Machine Co..... Machinists.  
 Stewart & Button..... Steam & Gas Fitters.  
 Thames Iron Works..... Rolling Mills.  
 Treadway, F. W..... Plumber.  
 Vaughn, Alfred H. & Son..... Iron Foundry.

**OAKVILLE.**

Seymour, Smith & Son..... Mfrs. Hardware.

**PEQUABUCK.**

Terry, Andrew & Co..... Iron Founders.

**PINE MEADOW.**

Chapin's, H. Son..... Edge Tool Mfrs.

**PLAINFIELD.**

Robinson & Fowler Foundry Co.

**PLAINVILLE.**

Bristol, T. L..... Mfr. Bolts.  
 Carter, Burwell..... Brass Foundry.  
 Hamlin, John D..... Mfr. Edge Tools.

**PLANTSVILLE.**

Clark, J. B. & Co..... Machinists.  
 Clark, L. C. & Co..... Mfrs. Bolts, &c.  
 Plant, E. H..... Mfr. Bolts.  
 Prindle, F. B..... Mfr. Machine Bolts and Screws.

**PLYMOUTH.**

Eagle Lock Co..... Mfrs. Locks.  
 Parker, Edward..... Machinist.  
 Terry, Andrew & Co..... Malleable Iron.  
 Terryville Mfg. Co..... Mfrs. Edge Tools.  
 Waters, George..... Machinist.

**POMFRET.**

Taft, Geo. W..... Mfr. Agl. Impt.

**PORTLAND.**

Pickering, T. R. & Co..... Founders & Machinists.  
 Roberts & Plummer..... Machinists.

**PUTNAM.**

Lee, Frank..... Iron Foundry.  
 Whittle, Jas. H..... Sheet Iron Worker.

**REDDING RIDGE.**

Sanford, Charles..... Iron Foundry.

**RIVERTON.**

Eagle Co. The..... Mfrs. Scythes.

**ROCKVILLE.**

Chadwick, J. H..... Machinist.  
 Kuhnley, E. A..... Plumber.  
 Murless, Herbert B..... Iron Foundry.  
 Putnam, Silas..... Mfr. Water Wheels.  
 Thompson & Holmes..... Mfrs. Chucks.

**ROCKY HILL.**

Billings & Whitman..... Iron Foundry.  
 Hart Hardware Mfg. Co.

**ROXBURY.**

Gorham, J. G.,.....Iron Foundry.  
Warner, H. H. & Co.,.....Mfrs. Files.

**SCITICO.**

King, Levantine,.....Mfr. Agl. Impts.

**SEYMOUR.**

Beecher, F. H.,.....Mfr. Augers & Bits.  
Fowler Nail Co.,.....Mfrs. Nails.  
French, Carlos,.....Mfr. Car Springs.  
Garrett & Beach,.....Mfrs. Gimlets, &c.  
Humphryville Mfg. Co.,.....Mfrs. Augers & Bits.  
Seymour Brass Mfg. Co.,.....Mfr. Augers, &c.  
Smith, James M.,.....Machinist.  
Swan, James,.....Mfr. Augers, &c.

**SHARON VALLEY.**

Sharon Valley Iron Co.,.....Foundry.  
Sharon Valley Malleable & Gray Iron Works.

**SHELTON.**

Bassett, D. M.,.....Mfr. Iron Bolts.  
De Forest, Thos. B.,.....Iron & Brass Foundry.  
Johnson, A. L.,.....Millwright.

**SIMSBURY.**

Smith, Henry A.,.....Machinist.  
Whitehead, Wm.,.....Machinist.

**SOUTHBURY.**

Wakelee, Chas. H.,.....Mfr. Plows.

**SOUTH COVENTRY.**

Washburn, Alanson,.....Foundry.

**SOUTHINGTON.**

Etna Nut Co.,.....Mfrs. Bolts & Nuts.  
Hobart, Chas. P.,.....Brass Foundry.  
Peck, Stow & Wilcox Co.,.....Mfrs. Hardware.  
Southington Cutlery Co.,.....Mfrs. Cutlery.

**SOUTH MANCHESTER.**

Case Machine Works,.....Paper Machinery.  
Cheney Bros.,.....Machinists.

**SOUTH NORWALK.**

Duncan, W. H.,.....Mfr. Iron Fencing, &c.  
Giles & Clancy,.....Iron Foundry.  
Hoyt & Meeker,.....Plumbers.  
Le Count, C. W.,.....Machinery.  
Lockwood Mfg Co.,.....Iron Castings.  
Norton, M. M.,.....Plumber & Gas Fitter.  
Norwalk Iron Works Co.,.....Mfrs. Pumps & Steam Engines.  
Norwalk Lock Co.,.....Mfrs. Locks.

**SOUTHPORT.**

Wheeler & Cook,.....Plumbers.

**SOUTH WINDHAM.**

Smith, Winchester & Co., Mfrs. Paper Machinery.

**STAFFORD SPRINGS.**

Holt & Burwell,.....Machinists.  
Washburn, Jno. R.,.....Mfr. Chucks.  
Whiton, David E.,.....Mfr. Chucks.  
Whiton, Henry,.....Mfr. Chucks.

**STAFFORDVILLE.**

Amiden, S. B.,.....Machinist.

**STAMFORD.**

Ashcroft, R.,.....Plumber.  
Fox, Chas.,.....Machinist.  
Horan, James J.,.....Plumber & Gas Fitter.  
Ingersoll, Samuel C.,.....Machinist.  
Ingersoll, Simon,.....Machinist.  
Inger-oil Mfg Co.,.....Machinists.  
Lockwood, Chas.,.....Machinist.  
Lum, B. D.,.....Plumber.  
Merritt, O. J.,.....Plumber.  
Stamford Foundry Co.  
Stillwater Co. The,.....Rolling Mill.  
White, Elbert,.....Mfr. Chains.  
Yale Lock Mfg. Co.,.....Locks, &c.

**STONINGTON.**

Atwood Machine Co.,.....Mfrs. Silk Machines.  
Berry, S. H. & Co.,.....Machinists.  
Miller, A. B.,.....Iron Foundry.  
Storrs, Jos. W.,.....Iron Foundry.

**STRATFORD.**

Kugler, John,.....Plumber.

**THOMASTON.**

American Knife Co.,.....Mfrs. Cutlery.  
Booth, W. E.,.....Plumber.  
Plume & Atwood Mfg. Co.,.....Mfrs. Brass.

**THOMPSONVILLE.**

King, Albert,.....Mfr. Plows.

**TORRINGTON.**

Agard & Nichols Hardware Co.,.....  
Coe Brass Co.,.....Mfrs. Brass.  
Excelsior (The) Knife Co.,.....Mfrs. Cutlery.  
Hendey Machine Co.,.....Machinists.  
Torrington Mfg. Co.,.....Mfrs. Machinery & Tools.  
Turner & Seymour Mfg. Co.,.....Brass & Iron Goods.  
Union Hardware Co.,.....Mfrs. Skates.

**UNION CITY.**

Naugatuck Machine Co.,.....Machinists.  
Tuttle & Whittemore Co.,.....Iron Foundry.  
Union Knife Co.,.....Mfrs. Knives.

**UNIONVILLE.**

Hart, Chauncey,.....Mfr. Tools.  
Humphrey, R. & Co.,.....Mfrs. Hardware.  
Meech & Hart Co.,.....Mfrs. Cutlery.  
Pond & Hart,.....Mfrs. Cutlery.  
Preston, H. M.,.....Machinist.  
Union Nut Co.,.....Mfrs. Bolts & Nuts.  
Union Rolling Mill Co.

**VERNON.**

Fenton, J. H.,.....Plumber.  
Hunnley Bros.,.....Plumbers.

**VOLUNTOWN.**

Montgomery, Albert,.....Machinist.

**WALLINGFORD.**

Campbell, J. R. & Co.,.....Mfrs. Bits & Gimlets.  
Hall, Elton & Co.,.....Mfrs. Britannia Ware.  
Hotchkiss, A. S.,.....Mfr. Bolts.  
Judd Mfg. Co.,.....Hardware Mfrs.  
McCormick & Coshen,.....Plumbers.  
Simpson, Hall, Miller & Co., Mfrs. Britannia Ware.

**WAREHOUSE POINT.**

Taylor, Edward,.....Machinist.

**WASHINGTON DEPOT.**

Black, R.,.....Founder & Machinist.

**WATERBURY.**

American Ring Co.,.....Mfrs. Brass Goods.  
Barnard, Son & Co.,.....Mfrs. Shears.  
Benedict & Burnham Mfg. Co.,.....Mfrs. Brass &c.  
Blake & Johnson,.....Machinists.  
Blake, Lamb & Co.,.....Mfrs. Steel Traps.  
Blün & Henius Mfg. Co.,.....Mfrs. Lock Springs.  
Booth, S. & Son,.....Plumbers.  
Brown & Bros.,.....Mfrs. Brass.  
Burritt, A., Hardware Co.,.....Mfrs. Hardware.  
Carrington Mfg. Co.,.....Mfrs. Brass Goods.  
Cunningham, J. M.,.....Plumber.  
Daly, M. J.,.....Steam & Gas Fitter.  
Duffy, James P.,.....Boiler Maker.  
Gaylord, Cross & Speir,.....Founders & Machinists.  
Griggs, H. C.,.....Machinist.  
Henderson, John, Jr.,.....Machinist.  
Holmes, Booth & Hayden,.....Mfrs. Brass & Copper Goods, &c.  
Johnson, Willis,.....Mfr. Metal Goods.  
Keeler, Homer W.,.....Plumber.  
Kirk, Thomas,.....Machinist.

**WATERBURY—Continued.**

Lampson, E. R. & Co., ..... Gas Fitters.  
 Lawton, Richard C., ..... Die Sinker.  
 Lane Mfg. Co., ..... Mfrs. Brass Goods.  
 Lewis, E. C., ..... Mill Machinery.  
 Maltby, Curtis & Co., ..... Nail Pullers.  
 Manville, E. J., ..... Machinist.  
 McKeon, P., ..... Plumber.  
 Novelty Mfg. Co., ..... Mfrs. Brass Goods.  
 Plume & Atwood Mfg. Co., ..... Mfrs. Brass Goods.  
 Scoville Mfg. Co., ..... Mfrs. Brass Goods.  
 Sears, Henry, Mfg. Co., ..... Mfrs. Shears.  
 Smith & Griggs Mfg. Co., ..... Mfrs. Brass Goods.  
 Specialty Mfg. Co., ..... Mfrs. Brass Goods.  
 Steele & John-on Button Co., ..... Mfrs. Brass Buttons.  
 Waterbury Brass Co., ..... Mfrs. Sheet Brass.  
 Waterbury Buckle Co., ..... Mfrs. Buckles.  
 Waterbury Button Co., ..... Mfrs. Brass Buttons.  
 Waterbury Farrell Foundry & Machine Co.  
 Waterbury Mfg. Co., ..... Mfrs. Brass Goods.  
 Waterbury Steam Boiler Works, ..... Boiler Makers.  
 White, A. M. & Son, ..... Machinists.

**WATERTOWN.**

Smith, S. & Sons, ..... Mfrs. Hardware.  
 Wheeler, Joseph, ..... Machinist.

**WATERVILLE.**

Sprague & Royden, ..... Mfrs. Cutlery.

**WEST CHESHIRE.**

Cheshire Brass Co., ..... Mfrs. Brass.  
 Mix, J. W. & Co., ..... Mfrs. Edge Tools.  
 Rugg Mfg. Co., ..... Mfrs. Edge Tools.

**WEST CORNWALL.**

Mallinson, J. & Co., ..... Mfrs. Shears.  
 Union Shear Co., ..... Mfrs. Shears.

**WESTON.**

Bradley, G. W., ..... Mfr. Edge Tools.  
 Coley, David L., ..... Iron Foundry.  
 Crofut, Charles, ..... Machinist.  
 Oden, Henry A., ..... Mfr. Edge Tools.  
 Wheeler, Henry B., ..... Iron Foundry.

**WESTPORT.**

Bradley, G. W., ..... Mfr. Axes.  
 Cornwall & Patterson Mfg Co., ..... Mfrs. Hardware.  
 Wheeler, H. B., ..... Mfr. Ag'l Imp'ts.

**WEST STAFFORD.**

Buck, H. A., ..... Mfr. Fire Arms.  
 Washburn, John R., ..... Mfr. Chucks.  
 Whiton, D. E., ..... Machinist.

**WESTVILLE.**

Baker, J. F., ..... Machinist.  
 Brown, Reuben H. & Co., ..... Mfrs. Bits.  
 Clark, Frank E., ..... Mfr. Bits.  
 New Haven Nut Co., ..... Mfrs. Nuts.  
 Petrie, Walter R., ..... Machinist.  
 Rawson, James, ..... Mfr. Cutlery.

**WEST WINSTED.**

Batcheller, W. T. & Co., ..... Mfrs. Scythes.  
 Beardsley Scythe Co., ..... Mfrs. Scythes.  
 Empire Knife Co., ..... Mfrs. Cutlery.  
 Henry Spring Co., ..... Mfrs. Springs.  
 Howe Bros & Hulbert, ..... Mfrs. Scissors, &c.  
 Hulbert Iron Co., ..... Mfrs. Iron.  
 Richards, T. C. Hardware Co., ..... Mfrs. Screws.  
 Thayer Scythe Co., ..... Mfrs. Scythes.  
 Winstead Hoe Co., ..... Mfrs. Edge Tools.

**WETHERSFIELD.**

Hopson & Brainerd Mfg. Co., ..... Iron Foundry, &c.

**WILLIMANTIC.**

Alford, G. H., ..... Iron & Steel.  
 Gorry, W. M., ..... Brass & Iron Foundry.  
 Jilison & Palmer, ..... Machinists.  
 Martin, C. L., ..... Steam & Gas Fitter.  
 Morrison, W. G. & A. R., ..... Mfrs. Silk Machinery.  
 Vanderman, Wm., ..... Plumber.  
 Wilton Mfg. Co., ..... Mfrs. Hardware.

**WILLINGTON.**

Morrison, Ed., ..... Mfr. Ag'l Imp'ts.

**WILTON.**

Merwin, Augustus, ..... Machinist.

**WINDHAM.**

Hatch, John & Sons, ..... Machinists.

**WINDSOR LOCKS.**

Clark, Geo. P., ..... Machinist.  
 Converse, A. W. & Co., ..... Iron Foundry.  
 Farist & Windsor Co., ..... Mfrs. Steel.  
 Glover, Geo. Jr., ..... Machinist.  
 Horton, E. & Son Co., ..... Patent Screw Chucks  
 & Machinists' Tools.  
 Windsor Locks Machine Co.

**WINSTED.**

Carroll, P. S., ..... Machinist.  
 Moore, Franklin & Co., ..... Mfrs. Bolts.  
 Thompson & Co., ..... Mfrs. Bolts.  
 Utton, Geo. W., ..... Plumber & Gas Fitter.  
 Winsted Foundry & Machine Co.  
 Winsted Mfg. Co., ..... Mfrs. Scythes.

**WINTHROP.**

Arnold, E. W., ..... Brass Foundry.

**WOLCOTTVILLE.**

Church, Chas. F., ..... Machinist.  
 Coe Brass Mfg. Co., ..... Mfrs. Brass Goods.  
 Excelsior Knife Co., ..... Mfrs. Cutlery.  
 Hendey Machine Co., ..... Machinists.  
 Turner & Seymour Mfg. Co., ..... Mfrs. Brass.

**WOODBURY.**

American Knife Co., ..... Mfrs. Cutlery.  
 Dews, Edwin, ..... Machinist.

**YALESVILLE.**

L'Hommedieu Hardware Co., ..... Mfrs. Augers,  
 Skates, &c.  
 Parker, Chas. & Co., ..... Iron Foundry.  
 Tracy, E. H., ..... Mfr. Augers.

**DAKOTA.****BISMARCK.**

Bird, Geo. M., ..... Machinist.

**CASSELTON.**

Narrish, Stahlow & Co., ..... Machinery.

**DEADWOOD.**

Moche, Geo. S., ..... Plumber.

**DELL RAPIDS.**

Sibbison, W. J., ..... Machinery.

**FARGO.**

Fargo Car Wheel and Iron Works.  
 Odegaard, J. T., ..... Machinery.  
 Rossiter, C. W., ..... Machinist.  
 Treat, H. P. & Co., ..... Plumbers.

**GRAND FORKS.**

Keller Bros., ..... Plumbers.

**GROTON.**

Gordon, J. M., ..... Machinery.

**HASTINGS.**

Grovenor, E. W., ..... Machinery.

**JAMESTOWN.**

Mulliken, F. G., ..... Machinery.

**KIMBALL.**

Hay & Smith, ..... Machinery.

## MIN'TO.

Stacy, A. J. .... Machinery.

## TOWER CITY.

Haynes &amp; Stultz ..... Machinery.

Schmidt, John ..... Mfrs. Plows.

## TROY.

Carter &amp; Kimberly ..... Iron Foundry.

## TYNDALL.

Conrey, Stephen C. .... Machinery.

## VERMILLION.

Barron &amp; Iverson ..... Machinery.

## WAHPETON.

Benesh, Chas. .... Machinist.

French, T. L. .... Machinery.

Whitehouse, A. T. .... Iron Works.

## WALCOTT.

Davis, F. E. &amp; Co. .... Machinery.

## YANKTON.

Campbell, J. &amp; J. .... Machinists.

McIntyre, B. R. .... Iron Foundry.

Martin &amp; Anderson ..... Iron Foundry.

## DELAWARE.

## DOVER.

Jarrell, Geo. P. .... Ga. fitter.

Jones, E. L. &amp; Co. .... Machinists.

## FREDERICKA.

Tomlinson, Jas. .... Iron Foundry.

## HARRINGTON.

West, Geo. .... Iron Foundry.

## HENRY CLAY FACTORY.

Holland, Hugh. .... Sheet Iron.

## MILFORD.

Grier, Geo. S. .... Iron Foundry.

Mathews, S. .... Iron Founder &amp; Machinist.

## NEWARK.

Allen, Lewis L. .... Iron Foundry.

Casho Machine Co. .... Machinists.

Wilson, Alex. .... Machinist.

## NEW CASTLE.

Delaware Iron Co. .... Mfrs. Iron.

Lanaster, J. B. .... Plumber.

Kiding, John ..... Machinist.

Riverside Rolling Mill Co.

## NEWPORT.

Bringhurst, J. R. .... Iron Works.

Marshall Iron Co. .... Mfrs. Sheet Iron.

## SEAFORD.

Stewart, W. J. .... Iron Foundry.

## SMYRNA.

Evans, J. B. &amp; Co. .... Iron Foundry.

Taylor, Geo. W. &amp; S. .... Machinists &amp; Iron Founders.

## WILMINGTON.

## MACHINISTS.

Betts Machine Co., Henderer, Edmond &amp; Co.

Machinists Tools. Drill Presses.

Bowers, Dure &amp; Co., Hilles &amp; Jones,

Car Builders. Machinists' Tools.

Harlan &amp; Hollingsworth Hirtzel, J. G.

Co., The, Car &amp; Iron Hopkins, John W.

Ship Builders. Jackson &amp; Sharp Co.,

Henderer, A. L. Car Builders.

## WILMINGTON—Continued.

Pierson, J. L.	Shaw, W. T.
Poole, J. Morton Co.	Trump Bros. Machine
Pusey & Jones Co.	Co., S-roll Sawing Ma-
Iron Boat Builders.	chines.
Remington & Co.	

## PLUMBERS, STEAM AND GAS FITTERS.

Brady, John C.	Riley, Thomas.
Brison, John.	Sharp, A. L.
Ferris & Garrett.	Speakman, Allen.
Gawthrop & Bros.	Speakman, Jas.
Gillespie & Co.	Stewart & Jones.
Greenley, John.	Traynor, J. F.
Hutton, Robert.	Van Trump, Jas. C.
McHugu, A.	Watt, W. S.

## MISCELLANEOUS.

Bellah, Qingley & Co.	Iron & Steel.
Bli-s, Chas. W.	Mfr Edge Tools.
Cobb, Henry B. & Co.	Mfrs Steel Springs.
Davis, John D.	Mfr Iron Fences.
Delaware Screw Co.	Mfrs Screws.
Diamond State Iron Co.	Mfrs Bar Iron and
R. R. Supplies.	
Diamond State Stove Foundry Co.	
Edge Moor Iron Co.	Iron Girders, Beams, &c.
Finley, Garrett & Wilson	Iron & Steel.
Fritsch, B.	Mfr Files.
Gawthrop & Son	Mfrs Hydraulic Rams.
Green & Wilson	Mfrs Metallic Powder Kegs.
Harper, Warren	Machinery & Supplies.
Hayer, James P. & Co.	Spring Works.
Heisler, McBride & Co.	Coppersmiths.
Hodgman, S. A.	Phila. Balt. & Central R. R.
Johnson, J. R. & Co.	Iron.
Kent Iron & Hardware Co.	Iron & Steel.
Lobdell Car Wheel Works.	
McCullough Iron Co.	Rolling Mill.
McWhorter, E. H. & Co.	Machinery & Supplies.
Meiley, J. & R.	Rolling Mill.
Old Ferry Mill.	Rolling Mill.
Pickels, Henry F.	Iron Foundry.
Seidel Hastings & Co.	Rolling Mill.
Stewart, Charles	Iron Foundry.
Stone, G. W.	Machinery & Supplies.
Tazewell, Henry	Mfr Augers.
Teas, Jos. & Co. (The)	Bolt & Nut Works.
Trainor, Jas. F.	Gas Fixtures.
Wilmington Malleable Iron Co.	Castings.

## WOODDALE.

Wood, Alan &amp; Co. .... Rolling Mill

## DISTRICT OF CO-LUMBIA.

## WASHINGTON.

## MACHINISTS.

Baldwin, Levi J.	634 D, N. W.
Forsburg & Murray	219 7th, N. W.
Jordan, Augustus	615 7th, N. W.
McClelland, John	La Av. cor. 10th, N. W.
Nicholson, Joseph	3528 M, N. W.
Sinclair & Aachenbach	1112 C, N. W.

## PLUMBERS, STEAM AND GAS FITTERS.

Anderson, James F.	304 B. S. E.
Anadale, John A.	1234 9th, N. W.
Atchison, Julius I.	1316 14th, N. W.
Barnard, Edward	1337 H, N. W.
Barry, John	505 18th, N. W.
Benter, Max A.	606 D, N. W.
Blinkhorn & Co.	427 10th, N. W.
Hond, Joseph D.	133 Pa. Av. N. W.
Bride, C. T.	306 Pa. Av. S. E.
Brien, James F.	419 9th, N. W.
Bright, James	13-7 E. S. E.
Brooks, E. F.	531 15th, N. W.
Brooks, R. C.	622 D, N. W.
Campbell, R. G.	517 10th, N. W.
Caverly, Edward & Co.	1425 N. Y. Av. N. W.
Connor, James A.	1335 9th, N. W.

## WASHINGTON.—Continued.

Cruitt & Scott,.....	810 9th, N. W.
Daly, John,.....	703 9th, N. W.
Daly, P.,.....	1703 Vt. Av. N. W.
Dent, Augustus S.,.....	1327 C, S. W.
Donaldson, Thomas S.,.....	524 11th, S. W.
Edwards, Thos. J.,.....	907 F, N. W.
Fields, Geo. V.,.....	916 I, S. E.
Fitzhugh, J. B.,.....	306 E. Cap.
Fritz, T.,.....	917 7th, N. W.
Galloway, John R.,.....	1011 F, N. W.
Goodall, G. W.,.....	425 12th, N. W.
Gorman, Ed.,.....	807 14th, N. W.
Hannan, Daniel,.....	517 F, N. W.
Hannan, E. J.,.....	517 11th, N. W.
Hannan & Co.,.....	717 M, N. W.
Harrison, James T.,.....	603 Pa. Av. S. E.
Hayward & Hutchinson,.....	317 9th, N. W.
Hill, R. A.,.....	2230 13th, N. W.
Hilleary, T. W.,.....	434 11th, N. W.
Hurdle, Albert D.,.....	1262 32nd, N. W.
Hutchins, G. E.,.....	817 22nd, N. W.
Hutchinson, W. T.,.....	517 7th, S. E.
Kelly, Thos.,.....	2009 M, N. W.
King, F. A.,.....	1329 7th, N. W.
Lansdale, E. G.,.....	2134 Pa. Av. N. W.
Lockhead, James,.....	1414 Pa. Av. N. W.
McAvoy, Geo. F.,.....	710 14th, N. W.
McAvoy, J. M.,.....	1829 H, N. W.
McCarthy, John I.,.....	1251 32nd, N. W.
McDonnell, John,.....	617 La. Av. N. W.
McMahon & Wall,.....	2008 I, N. W.
Miller, T. W. & Co.,.....	438 9th, N. W.
Mitchell, John,.....	820 14th, N. W.
Moss, J. W.,.....	408½ N. J. Av. N. W.
Mounteney, John J.,.....	1303 H, N. W.
Nolan, James,.....	1411 F, N. W.
Nonnan, T. V.,.....	811 14th, N. W.
O'Brien, M. J.,.....	306 4½ St. N. W.
O'Donoghue, Joseph,.....	3055 M, N. W.
O'Hagan, James,.....	1917 Pa. Av.
O'Hare, E.,.....	2118 Pa. Av. N. W.
Paul, Geo. W.,.....	1330 32nd, N. W.
Power, John A.,.....	424 9th, N. W.
Ragan, James,.....	135 F, N. W.
Reach, Robert,.....	1742 14th, N. W.
Ridgeway, E. A.,.....	1311 F, N. W.
Rothwell, Wm.,.....	224 7th, S. E.
Sanderson, John W.,.....	303 E, N. W.
Schaffer, G. F.,.....	625 La. Av. N. W.
Seal, Geo. A.,.....	1015 F, N. W.
Shedd, Samuel S.,.....	406 9th, N. W.
Sherwood, Samuel H.,.....	1148 7th, N. W.
Spearling, Samuel J.,.....	450 Pa. Av. N. W.
Suman, James L.,.....	713 D, N. W.
Tally, James,.....	1017 I, N. W.
Tennant, Alex.,.....	3063 M, N. W.
Thorn, C. G.,.....	12 3 F, N. W.
Thorn, H. C.,.....	7 45 13th, N. W.
Umhan, Christian,.....	1800 7th, N. W.
Ward & Cunningham,.....	411 11th, N. W.
Waters, S. M.,.....	1213 32nd, N. W.

## MISCELLANEOUS.

Ballauf, Daniel,.....	Mfr Models.
731 7th, N. W.	
Beckham & Middleton,.....	Iron Foundry.
3105 Water Av.	
Beyer, Louis,.....	Mfr Files.
7th nr. Grand Av.	
Bromwell, J. E.,.....	Plating Works.
1214 Pa. Av. N. W.	
Burkhart, Jacob,.....	Coppersmith.
324 18th, N. W.	
Daughton, John B.,.....	Iron Foundry.
1212 D, N. W.	
Gray & Noyes,.....	Iron Works.
Maine Av. nr. 3rd, S. W.	
Leitch, R. & Sons,.....	Brass Founders.
1214 D, N. W.	
McGill, James H.,.....	Iron Foundry.
1421 N. Y. Av. N. W.	
McKelden & Co.,.....	Plumbers Supplies.
319 12th, N. W.	
Matz & Burger,.....	Model Maker.
633 F, N. W.	

## WASHINGTON.—Cont nued.

Mead, James H.,.....	Mfr Iron Railings.
1216 C, N. W.	
National Shelf & File Co.,.....	1008 F, N. W.
Pettit & Driggs,.....	Iron Founders.
14th cor. B, N. W.	
Rosendale, Henry,.....	Mfr Files.
513 K, N. W.	
Schneider's C. A. Sons,.....	Iron Works.
204 to 210 12th, N. W.	
Somerville, Thos.,.....	Brass Works.
316 13th, N. W.	
White, Geo. & Co.,.....	Iron Foundry.
462 Md. Av. S. W.	
Whyte & Overman,.....	Galvanized Iron Workers.
300 13th, N. W.	

## FLORIDA.

## BLACKWATER.

Creary, M. T. & J. E.,.....	Iron Foundry.
Ollinger & Bruce,.....	Shipwrights.

## JACKSONVILLE.

French, Alfred,.....	Iron Foundry.
Murphy, T.,.....	Machinist.
Pond, F. R.,.....	Iron Foundry.
Shields, James,.....	Boiler Maker.
Weston, James J.,.....	Machinist.

## ORANGE SPRINGS.

Livingston, John S. & Co.,.....	Machinists.
Macy, W. H.,.....	Machinist.

## PALATKA.

Roberts, J. W.,.....	Florida Southern Railway.
----------------------	---------------------------

## PENSACOLA.

Cosgrave, J.,.....	Founder and Machinist.
Nicoll, R. G.,.....	Pensacola & Perdido R. R.
Ramsey & Simmons,.....	Boiler Makers.

## ST. AUGUSTINE.

Ferron, Geo.,.....	St. Johns Railway.
--------------------	--------------------

## SANFORD.

Campbell, J. A.,.....	South Florida R. R.
-----------------------	---------------------

## TAMPA.

Haenke, Wm.,.....	Machinist.
-------------------	------------

## WILLIAMSBURG.

Devine, J. T.,.....	Machinist.
---------------------	------------

## GEORGIA.

## ADAIRSVILLE.

Branch, I.,.....	Machinist.
------------------	------------

## ALBANY.

Patterson, Thos. & Sons,.....	Iron Foundry.
Tift, C. W. & Co.,.....	Machinists.

## ATHENS.

Athens Foundry & Machine Co.	
------------------------------	--

## ATLANTA.

Atlanta Agricultural Works,.....	Mfrs Agril. Impt.
Brenner, W.,.....	Mill Machinery.
Davis, John,.....	Founder and Machinist.
Ferguson & Blount,.....	Mfrs. Plows.
Flynn, J. H.,.....	Western & Atlanta R. R.
Georgia Iron Works,.....	
Gifford, J. A.,.....	Boiler Maker.
Goldsmith Bros.,.....	Machinery.
Haiman, Elias,.....	Mfr. Plows.
Harwell & Smith,.....	Machinery.
Hunnicut & Bellingrath,.....	Gas Fitters.
Johnson, Jos. H.,.....	Mfr Agricultural Implements.
King, Robert,.....	Atlanta & West Point R. R.
Meneely, G. R. & Co.,.....	Iron Foundry.
Noble, James Jr.,.....	Boiler Maker.
Perkins Bros.,.....	Machinery.
Porter & Meaken,.....	Machinists and Founders.

**ATLANTA.**—Continued.

Ryan & Stockton.....Plumbers and Gas Fitters  
 Schanck & Thrower.....Machinists.  
 Trautwein, John.....Plumber.  
 Trautwein, William.....Coppersmith.  
 Van Winkle, E. & Co.....Founders and Machinists.  
 Venable, S. H.....Mfr Plows.  
 Wall, C. D.....Atlanta & Charlotte Air Line R. R.  
 Warlick, J. & Sons.....Plumbers and Gas Fitters.  
 White & Miller.....Machinery.  
 Wilkins, Post & Co.....Engine Builders.  
 Winship & Bro.....Iron Foundry.  
 Withers, W. S.....Iron Foundry.

**AUGUSTA.**

Chapman Bros.....Plumbers and Gas Fitters.  
 Cook, Jno. S.....Georgia R. R.  
 Cooper, Geo.....Machinist.  
 Lombard, Geo. R. & Co.....Iron Foundry.  
 McAuliffe, P.....Plumber and Gas Fitter.  
 Mast, J. B.....Machinist.  
 Pendleton Bros.....Founders and Machinists.  
 Pollard, W. C.....Machinery.  
 Robbe, C. A.....Plumber.  
 Walton, W. R.....Machinery.

**BARNESVILLE.**

Barnesville Iron Works.

**BARTOW.**

Bartow Iron Works...

**BLACK CREEK.**

Lafitte, J. V.....Machinist.

**BRUNSWICK.**

Burns, J. S.....Machinery.  
 Gray, H. P. & Co.....Iron Foundry.

**CARROLLTON.**

West & Spurlock.....Machinery.

**CARTERSVILLE.**

Baxter, T. W.....Machinery.  
 Georgia Car Co.....Car Mfrs.  
 Griffin, G.....Machinery.  
 Jones & Conyers.....Machinists.  
 McIntyre, Stevenson & Co.....Iron Founders and  
 Machinists.  
 Stephenson & Taylor.....Founders and Machinists.

**CASSVILLE.**

Headdden, W. & Son.....Mfrs. Plows.

**CEDAR TOWN.**

Cherokee Iron Works.

**CLARKSVILLE.**

Van Buren, Jarvis.....Machinist.

**CLOVERDALE.**

Nisbet, J. C.....Iron Works.

**COCHRAN.**

McVey & Choate.....Machinery.

**COLUMBUS.**

Columbus Iron Works.  
 Georgia Steam & Gas Pipe Co  
 Golden Bros.....Founders and Machinists.  
 Lawhorn & Co.....Machinery.  
 McIlhenny, Oliver.....Gas Fitter.  
 Southern Plow Co.,.....Mfrs Plows.

**COVINGTON.**

Camp, T.....Machinist.  
 Wingard & Evans.....Machinists.

**CUTHBERT.**

Foster & Brantley.....Iron Founders.

**DAHLONEGA.**

Hall, F. W.....Machinery.

**DALTON.**

Dalton Machine Co.....Machinists.

**DAWSON.**

Dawson Manufacturing Co.....Mfrs. Cars.

**EATONTON.**

Montgomery, Ezell & Co.....Machinery.

**ELBERTON.**

McMillan, F. D.....Machinist.

**FLEMING.**

Axtell, J.....Machinery.

**GAINESVILLE.**

Butler, R. H. & Co.....Iron Foundry.  
 Shockley & Trammell.....Machinery.

**GORDON.**

Merkinson, J. F.....Mfr. Plows.

**GREENSBORO.**

Sullivan, J. H.....Machinery.

**HIGH SHOALS.**

Owens, S.....Machinist.

**MACON.**

Carling, T. J.....Plumber and Gas Fitter.  
 Crocket, E. & Son.....Machinists.  
 Findlay, C. D.....Iron Works.  
 Johnston, W. T. & Co.....Plumbers.  
 Noble, James.....Boiler Maker.  
 Poole, Jonathan H.....Plumber.  
 Reynolds, A. & Son.....Iron and Brass Foundry.  
 Schofield, J. S. & Son.....Iron Foundry.  
 Stroberg, C. J.....Gas Fitter.

**MARIETTA.**

Withers, E. A.....Machinist and Founder.

**MORGANTOWN.**

Wilson, J.....Iron Works.

**NEWMAN.**

Cole, R. D. & Bro.....Founders and Michinists.

**POPLAR SPRINGS.**

Pitts, J.....Mfr. Plows.

**RINGGOLD.**

Bankstone, A. J.....Machinery.

**RIISING FAWN.**

Rising Fawn Iron Co.....  
 Warner, J. C.....Mfr. Iron.

**ROME.**

Noble Bros. & Co.....Machinists.  
 Stonewall Iron Works.  
 Towers & Sullivan.....Mfrs. Plows.  
 Warlick, J. T.....Gas Fitter.

**SANDERSVILLE.**

Lang, S. G.....Machinist.

**SAVANNAH.**

Arden, D. S.....Central R. R. of Georgia.  
 Brown R. F.....Savannah, Skiddaway & Seaboard  
 R. R.  
 Cockshutt & Jerguson.....Machinists.  
 Cosgrove, Chas. F.....Plumber.  
 Cosgrove, W.....Plumber.  
 Halligan, T. J.....Gas Fitter and Plumber.  
 Hollister, J. D.....Savannah, Florida & Western R. R.  
 McDonough & Ballantyne.....Iron Foundry.  
 McFall, M. J.....Plumber.  
 McMillan Bros.....Coppersmiths.  
 Manning, Jas. & Co.....Machinists.  
 Masters, P. E.....Plumber.  
 Miscally, J. S.....Plumber.  
 Monahan, B.....Boiler Maker.  
 Mulhagan, J. & T. & Co.....Machinists.  
 Nicholson, John.....Plumber.  
 Phoenix Iron Works.  
 Rourke, John.....Brass Foundry.  
 Small, C. P.....Plumber.  
 Snyder & Nipson.....Plumbers.  
 Tynan, J. W.....Machinist.  
 Wakefield, Chas. E.....Gas Fitter.



**SOCIAL CIRCLE.**

Carter, C. J. .... Machinist.  
Smith, W. F. .... Machinist.

**SPRING PLACE.**

Gonis, O. C. .... Machinery.

**THOMASVILLE.**

Thompson, C. B. .... Iron Foundry.

**WEST POINT.**

Lanier, W. C. & L. .... Iron Foundry.

**IDAHO.****PARIS.**

Paris Co-operative Institution.....Machinists.

**SILVER CITY.**

McGregor & St. Clair.....Iron Foundry.

**ILLINOIS.****ABINGTON.**

Hooker, C. .... Machinist.

**ALGONQUIN.**

Johnston, John.....Machinist.

**ALPHA.**

Blade & Eckdale.....Mfrs. Plows.

**ALTON.**

Alton Agricultural Works.....Mfrs. Agl. Imp'ts.  
Beall & Bro.....Machinery.  
Bruner & Duncan.....Iron Foundry.  
Hayden, Geo. D.....Machinery.  
Hopgood Plow Co.....Mfrs. Plows.  
Johnson, Jos. H.....Plumber.  
Mellen, J. & D.....Mfrs. Plows.  
Topping Bros.....Iron.

**ALTONA.**

McKown, George.....Machinist.

**AMBOY.**

Fish, W. I.....Mfr. Plows

**ARLINGTON.**

Cosley, John.....Machinist.

**ASHLEY.**

Siebert Bros.....Mfrs. Plows.

**ASTORIA.**

Saville, W. A. & Bro.....Iron Foundry.

**ATHENS.**

Kinhart, Jno. A.....Machinery.

**AUBURN.**

Morse, Robt. E.....Mfr. Agri. Impts.

**AURORA.**

Bouton & Co.....Iron Foundry.  
Bryan, H. S.....Chicago & Iowa R. R.  
Budlong J. J. & Co.....Mfrs. Agl. Impts.  
Goodrich, Horace H.....Mfr. Fanning Mills.  
Hoyt & Bro. Mfg. Co.....Founders & Machinists.  
Johnson, L. E., Chicago Burlington & Quincy R. R.  
Lawson, John.....Plumber & Gas Fitter.  
Spear, Warren.....Machinist.

**AVA.**

Worthen, H.....Machinist.

**BATAVIA.**

Osgood & Shumway.....Iron Foundry.  
United States Wind Engine & Pump Co.

**BEARDSTOWN.**

Fidler, Mrs. M. E.....Iron Foundry.  
Forsyth, A.....Chicago, Burlington & Quincy R. R.  
Hood, James.....Mfr. Plows.

**BELLEVILLE.**

American Stove Mfg. Co.  
Belleville, Mfg. Co.....Mfrs. Sewing Machines.  
Belleville Nail Co.....Mfrs. Nails.  
Belleville Tool Co.....Mfrs.  
Brenner, John A.....Iron Foundry.  
Crossman, John A.....Mfr Tools.  
Ehret, Jacob.....Machinist & Brass Founder.  
Esler & Ropiequet Mfg. Co.....Mfrs. Agl. Impts.  
Gaylord, G. W.....Iron Foundry.  
Geiss, Jacob.....Gas Fitter.  
Gundlack, P. M.....Mfr. Agl. Impts.  
Harrison Machine Works.....Mfrs. Thresh'g Mach.  
Koderhault, J. & Co.....Machinists.  
Liebig & Koderhault.....Machinists.  
Minor, A. & Co.....Machinists & Iron Founders.  
Oster & Bro.....Gas Fitters.  
Rentschler, J. B.....Mfr. Drills.  
Rogers Foundry Co.....Iron Founders.  
Schaadt, John S.....Mfr. Plows.  
Schaeffer, J. & Bro.....Boiler Makers.  
Vetter, Philip.....Iron Foundry.

**BELVIDERE.**

Crosby, F. P.....Machinist.  
Longcor, S.....Mfr. Plows.

**BLOOMINGTON.**

Bloomington Gas Fitting Co.  
Bloomington Store Co.  
Brokan, Abram.....Mfr Plows.  
Diedrich, Nicholas.....Iron Foundry.  
Empire Machine Works.....Founders & Machinists.  
Gregory, George.....Mfrs. Plows.  
Hyde & Martens.....Mfrs. Plows.  
Loudon, Robert.....Iron Works.  
McIntosh, Geo.....Plumber & Gas Fitter.  
Soper & Rogers.....Iron Founders.  
Walton, John T.....Mfr. Plows.  
Wilson, John M.....Boiler Maker.

**BRAIDWOOD.**

Barker, I. & Co.....Iron Foundry.

**BUDA.**

Challender, Geo. T. & Co.....Mfrs. Plows.  
Corey, T. E.....Machinist.

**BUNKER HILL.**

McPherson, Geo. & Co.....Machinery.  
Sanders, Thos.....Machinist.

**BUSHNELL.**

Wann & Varner.....Iron Founders.

**CAIRO.**

Gerould, H. T.....Gas Fitter.  
Newland, C. B.....Gas Fitter.  
Reed, J. B.....Iron Foundry.  
Rennie, John T.....Iron Foundry.  
Tessier, Moses & Son.....Mfrs. Edge Tools.  
Thomas, J. T.....Machinist.  
Torrence, Smith.....Boiler Maker.  
Woodward, C. R.....Iron, etc.

**CAMBRIDGE.**

Vaughn, I. A.....Machinist.

**CANTON.**

Gideon, G. W.....Mfr. Agl. Impts.  
Luker, Chas.....Gas Fitter.  
Parlin & Orendorff Co.....Mfrs. Agl. Impts.  
Saville, J. M. & Son.....Iron Founders.  
Whitehead, S.....Machinist.

**CARBONDALE.**

Norbury, E. M.....Iron Foundry.  
Watson, L. L.....Iron Foundry.

**CARLYLE.**

Muehling, M. & Co.....Machinery.  
Parvin Bros.....Machinery.

**CARMI.**

Stone, T. W.....Farm Machinery.

**CARPENTERTVILLE.**

Illinois Iron & Bolt Co.....Mfrs. Nuts & Bolts.  
Star Mfg. Co.....Mfrs Agri Impts.

**CARROLLTON.**

Burruss, Jno. C.....Machinist.

**CENTRALIA.**

Benson, Jas.....Founder & Machinist.  
Centralia Iron & Nail Works.....  
Gray, J. H.....Machinist.  
Green, E. D.....Boiler Maker.  
Klepper, P-ter.....Gas Fitter.  
Morsman & Johnson.....Mfrs. Plows.

**CHAMPAIGN.**

Moore & Co.....Plumbers.  
Robinson & Burr.....Machinists.  
University Machine Shops.....  
Wright, Thomas.....Iron Foundry.

**CHARLESTON.**

Bain, A. N.....Iron Foundry.  
Koch, Ferdinand.....Plumber.

**CHESTER.**

Baronowsky, Jos.....Founder & Machinist.  
Lortz, Henry.....Mfr. Plows.

**CHICAGO.**

**AGRICULTURAL IMPLEMENT MANUFACTURERS**  
Easter, J. D.....18 So. Canal.  
Furst & Bradley Mfg. Co.....61 N. Desplaines.  
Gibbs & Sterrett, Mfg. Co.....47 So. Canal.  
Hopkins Mfg. Co.....122 5th Av.  
Johnston Harvester Co.....73 West Washington.  
McCallum, J. & Bros., Mfg. Co.....24 W. Lake.  
McCormick Harvester Co. Blue Island Av., cor. S.  
Western Av.  
Morgan, D. S. & Co.....244 Johnson.  
Pitts, H. A., Sons, Mfg. Co.....7 So. Jefferson.  
Pitts' Agricultural Works.....42 S. Canal.

**BOILER MAKERS.**

Bagawaneth, Wm., W. Quincy nr. S. Desplaines.  
Chicago Steam Boiler Works.....66 Michigan.  
Devine, Peter.....387 S. Canal.  
Enterprise Boiler Works.....17 Michigan.  
Excelsior Iron Works.....100 N. Clinton.  
Fraser & Chalmers.....Union and Fulton.  
Glennon & Bee.....56 Fulton.  
Hardy & Behles.....17 Michigan Av.  
Hinsdale, C. & Son.....34 Canal.  
Kroeschell Bros.....2 to 12 Michigan.  
McFarland, J., & Co.....505 S. Halsted.  
McGregor, Geo. L. & Co.....253 & 255 S. Clinton.  
Maurer, Henry.....29 S. Jefferson.  
Mohr, John & Son.....32 Illinois.  
Murphy, John D.....158 Fulton.  
Pfeiffer, Christopher.....64 Michigan.  
Pollard, S. D.....6 to 12 S. Canal.  
Schneider, John C.....704 Hinman.  
Spring, Warren.....199 to 219 S. Canal.  
Tobin, Hamler & Co.....469 So. Halsted.  
Union Steam Boiler Works.....36 Indiana.  
Willard, Chas. P. & Co.....20 LaSalle.

**BRASS FOUNDERS.**

Anderson Bros.....261 Randolph.  
Barnett, Alex.....85 Franklin.  
Bent, Thomas.....30 Market.  
Crane Bros., Mfg. Co.....10 N. Jefferson.  
Du Plaine & Park.....30 W. Quincy.  
Graham & Johnson.....47 S. Clinton.  
Haffner & Will.....26 S. Jefferson.  
Harris, E. T. & Co.....103 to 107 W. Monroe.  
Hart Mfg Co.....26 So. Jefferson.  
Lehner, J. H. & Co., S. Clinton, S. E. cor. W. Mon-  
roe.  
Mavhew, Payson E. & Co.....86 Market.  
North Side Brass Work.....57 N. Wells.  
Owens, Owen.....224 Washington.  
Pitts, A. V. & Co.....7 S. Jefferson.  
Reid, Samuel, & Co.....47 W. Washington.  
Rogers, W. C. & Co.....313 N. Market.  
Smeeth, Edward.....125 W. Randolph.

**CHICAGO—Continued.**

Thomas, H. & Bro.....86 Market.  
Turner, E. S. & Co.....244 LaSalle Av.  
Union Brass Mfg. Co.....7 to 109 Ohio.  
Weber, F., & Son.....43 S. Canal.  
Wild & Hills.....57 N. Wells.  
Wolff, L., Mfg. Co.....93 to 111 W. Lake.

**COPPER AND SHEET-IRON WORKERS.**

Andrews & Johnson.....175 Jackson.  
Bentz & Ewing.....239 Sta. e.  
Brada & Leiss Mfg. Co.....227 & 229 Jackson.  
Gibbs, F. M. & Co.....181 Washington.  
Goetz & Brada.....18 & 20 Michigan.  
Holmberg, Chas.....56 N. Wells.  
Kattentidt, C.....113 to 119 Michigan.  
Lyman, W. C.....49 Michigan.  
Maypole Bros.....54 S. Canal.  
North Western Copper Works.....56 N. Wells.  
Owens, O.....226 Washington.  
Pope, Wm.....130 N. Wells.  
Rollar, Wm.....90 N. Market.  
Wolff, L., Mfg. Co.....93 to 111 Lake.

**HARDWARE MANUFACTURERS.**

Bignell, S. L. Hardware Co.....238 Lake.  
Butler & Goldy Mfg. Co.....108 Lake.  
Chicago Hardware Mfg. Co.....29 Erie.  
Duff, James E.....273 So. Canal.  
Gender & Paeschke Mfg Co.....29 & 31 Lake.  
Goodrich W. W.....19 Wabash Av.  
Green, H. L., & Bro.....25 Lake.  
Griswold & Green.....133 LaSalle.  
Hill, A. F.....80 Market.  
Lyons & Finn.....47 S. Jefferson.  
Payson Mfg. Co.....1319 W. Jackson.  
Taylor, Chas. A.....45 S. Jefferson.  
Vaughn & Bushnell Mfg. Co.....108 W. Randolph.  
Wollensak, J. F.....225 Lake.

**IRON FOUNDRIES.**

Bass, J. H.....97 Dearborn.  
Bowen & Parker.....913 So. Halsted.  
Brown & Van Arsdale Mfg. Co.....28 Kingsbury.  
Brucker, Michael.....24 N. Jefferson.  
Burkhardt, Frederick.....192 W. 12th.  
Butzen, Joseph.....35 Indiana.  
Chicago Foundry Co.....Redfield, cor. Stein.  
Chicago Malleable Iron Co.....S. W. cor. W. 26th.  
Chicago Stove Works.....Blue Island Av., nr. W.  
22nd.  
Clark, Raffen & Co.....Kingsbury, cor. Ohio.  
Cook, George.....359 W. Randolph.  
Collins & Burgie.....261 to 277 S. Clinton.  
Crane Bros. Mfg. Co.....10 N. Jefferson.  
Dobbins, Thos S.....1934 State.  
Du Plaine & Parke.....30 W. Quincy.  
Eagle Foundry Co.....185 20th, cor. Archer Av.  
Eddy, R. M.....76 Illinois.  
Eureka Foundry.....122 to 126 S. Jefferson.  
Excelsior Iron Works.....100 N. Clinton.  
Featherston, John.....16 Front.  
Fitzpatrick, P. H.....60 W. Washington.  
Fraser & Chalmers.....111 to 147 Fulton.  
Glasebrook, Geo.....386 Throop.  
Gray Iron Co.....Erie, cor. Kingsbury.  
Greenlee Bros. & Co.....227 W. 12th.  
Griffin & Wells Foundry Co., S. Paulina, nr. Blue  
Island Av.  
Groot, Peter L.....586 to 600 S. Jefferson.  
Holmes, Prytt & Co.....13 N. Jefferson.  
King & Andrews.....218 N. Union.  
Klein, Henry.....179 Carroll.  
Klein, Matthias.....87 West Van Buren.  
Klemm, Wm.....259 Market.  
Kurtz Bros. & Huhrer.....822 to 832 Hubbard.  
Livesay Iron Works.....34 W. Quincy.  
Lloyd, Geo. E., & Co.....200 Clark.  
Love, Thomas.....Centre Av., S. E. cor. 15th.  
McGinnis, C.....91 Washington.  
MacDonald, Chas. A.....118 N. Canal.  
Marshall & Miller.....2347 Butler.  
Mason, Oscar F.....69 S. Jefferson.  
Mason & Davis.....347 Illinois.  
Mueller, F.....21 S. Jefferson.  
Munro & Ramsey.....234 & 236 S. Jefferson.  
Muth, Christian.....317 Blue Island Av.  
North Pier Foundry Co.....380 N. Water.  
O'Brien, James C.....78 N. May.

## CHICAGO—Continued.

Plamondon A., Mfg. Co.,	57 to 67 S. Clinton.
Pullen, John E.,	208 W. 12th.
Reder & Meyer,	185 Newberry Av.
Reichelt, Sanford & Co.,	26 Diller.
Russell & Co.,	76 & 79 Dearborn.
Savage Bros.,	42 Michigan.
Schillo, Cossman & Co.,	87 to 95 W. Polk.
Shoenberger Iron Foundry,	66 & 68 Michigan.
Union Foundry and Pullman Car Wheel Co.,	Dearborn, cor. 16th.
United States Foundry Co.,	90 to 100 Erie.
Vanderkloot & Son,	2611 to 2623 S. Halsted.
Vierling, McDowell & Co.,	23rd and Stewart Av.
Vulcan Foundry,	359 W. Randolph.
Vulcan Iron Works,	86 N. Clinton.

## IRON AND STEEL.

Akron Iron Co.,	89 Lake.
Ayers, John V., & Sons,	68 Washington.
Brown & Co.,	16 and 18 W. Lake.
Calumet Iron and Steel Co.,	Dearborn, N. W. cor. Monroe.
Carmichael & Emmens,	21 to 27 W. Lake.
Cartwright, McCurdy & Co.,	40 Dearborn.
Casey, T. S.,	154 Lake.
Cherrie & Co.,	92 Dearborn.
Crystal Falls Iron Co.,	59 Wabash Av.
Dalliba, W. S. & Co.,	186 Dearborn.
Greenebaum, Michael,	139 Lake.
Higgins, H. I., & Co.,	95 Washington.
Jones, J. C.,	45 Franklin.
Jones & Laughlin,	W. Lake, N. E. cor. N. Canal.
Kelley, Manus & Co.,	167 Lake.
Kimbark, S. D.,	74 to 84 Michigan.
Kimberly, Carnes & Co.,	40 Dearborn.
Lieberman, A.,	503 Clark.
McMurry, Alex. C.,	27 S. Water.
McVoy, John & Co.,	21 Michigan.
Moorehead & Co.,	16 and 18 W. Lake.
Morris, S., & Co.,	517 S. Canal.
Nicholson, John W.,	1601 Clark.
Park Bros. & Co.,	144 and 146 Lake.
Parkhurst & Wilkinson,	184 to 190 Lake.
Pease, E. S., & Co.,	95 Lake.
Pine Lake Iron Co.,	92 Dearborn.
Pugh & Co.,	115 Dearborn.
Rhodes, Chas. D.,	57 Dearborn.
Ryerson, J. T., & Son,	218 S. Water.
Sellers, Morris & Co.,	6 Ashland Block.
Springfield Iron Co.,	111 Dearborn.
Stubbs & Runyon,	2 Tribune Building.
Thompson, M. A.,	184 Dearborn.
Wick & Bonnell Co.,	14 N. Canal.
Wickersham, Chas. I. & Co.,	232 Lake.

## MACHINERY AND MACHINISTS' SUPPLIES.

Armor & Harris,	82 Market.
Arnold, James M.,	22 S. Canal.
Banks, W. H., & Co.,	45 S. Canal.
Barnes, Ambrose R.,	46 W. Lake.
Beekman, G. V., & Co.,	49 S. Clinton.
Benjamin, Fischer & Mallery,	22 and 24 S. Jefferson.
Bennett, Chas. G., & Co.,	170 Washington.
Blandy, H. & F.,	55 S. Canal.
Brown & Hunt,	47 W. Washington.
Burton, A. & Co.,	7 Market.
Caldwell, H. W.,	46 S. Canal.
Campbell & Lill,	228 Lake.
Champlin & Spencer,	152 and 151 Lake.
Chappell & Smith,	34 S. Canal.
Christholm Bros.,	64 S. Clinton.
Colby, J. V.,	84 Market.
Cook & Chick,	260 Michigan.
Douglass, Frank,	253 and 255 S. Canal.
Durkee & Doe,	38 S. Canal.
Eaton, Isaac J.,	44 N. Wells.
Fay, J. A., & Co.,	207 and 209 Lake.
Ford, David M.,	43 Franklin.
Green, H. B.,	56 W. Washington.
Green & Lichtenburger,	26 N. Clinton.
Grotz, Remig.,	229 S. Canal.
Gump, B. F.,	53 S. Canal.
Harris, S., & Co.,	41 S. Canal.
Haythorn, Wm., & Co.,	22 S. Canal.
Holton, C. C.,	208 S. Clinton.
Hukes & Spencer,	81 Jackson.

## CHICAGO—Continued.

James, W. A., & Co.,	275 S. Canal.
Kaestner, Chas., & Co.,	303 S. Canal.
Kingsland & Munn,	44 S. Canal.
Kirkwood, T. S. & A. J.,	171 Lake.
Lizars, J. S. & Co.,	33 5th Av.
McGregor, W., & Co.,	55 S. Clinton.
Machinists' Supply Co., The,	244 Lake.
Peacock, E. P.,	145 S. Clinton.
Peoples, J. A. & Co.,	28 S. Canal.
Perry, M. F.,	43 S. Canal.
Pollard, L. D.,	6 to 12 S. Canal.
Randolph & Love,	25 Lake.
Safford, Ellis & Co.,	52 Franklin.
Scoville, H. H.,	51 & 53 W. Lake.
Tuerk Bros. & Johnston,	86 Market.
Wardell & Hinckley,	14 S. Canal.
Wells, F. C.,	116 to 122 S. Clinton.
Whitcomb, Geo.,	206 La Salle.
Wilcox, S. G., & Co.,	24 S. Canal.
Woods, S. A., Machine Co.,	61 S. Canal.
Wormer, G. S. & Son,	38 & 40 S. Canal.

## MACHINISTS.

Adams Bros.,	31 S. Canal.
Avery & Burton,	226 Washington.
Benjamin, Fischer & Mallery,	22 and 24 S. Jefferson.
Boehme, Louis,	776 Milwaukee Av.
Boyle, D. & Co.,	10 N. Jefferson.
Bradwell, Thos.,	49 Dearborn.
Bullock, M. C.,	80 to 88 Market.
Burkhart, Frederick,	192 W. 12th.
Calhoun Machine Works,	156 and 158 5th Av.
Cedarleaf & Schultz,	52 Franklin.
Clacher Bros.,	80 Market.
Clark, Raffin & Co.,	Kingsbury, cor. Ohio.
Clause, John J.,	114 N. Market.
Colborne, Oliver,	32 and 34 S. Clinton.
Colbourn, Ledyard,	1521 State.
Corrigan, P. F.,	226 N. Sangamon.
Covel, Milo,	261 Randolph.
Crosby, G. A., & Co.,	259 and 261 Randolph.
Delano, E. A.,	51 and 53 W. Washington.
Douglass, Frank,	253 and 255 S. Canal.
Doyle & Rosbach,	224 Washington.
Duncan, I. W.,	59 Market.
Durkee & Doe,	38 S. Canal.
Eaton & Prince,	74 and 76 Michigan.
Eibach, Herman A.,	259 Randolph.
Elmes, Chas.,	Fulton, N. W. cor. N. Jefferson.
Excelsior Iron Works,	100 N. Clinton.
Excelsior Machine Works,	345 and 347 S. Canal.
Fay, J. A. & Co.,	207 & 209 Lake.
Fish, A. J., & Co.,	57 Lake.
Foot, R. R., & Co.,	175 Jackson.
Fraser & Chalmers,	111 to 147 Fulton.
Furness Bros.,	62 Fulton.
Gauschow, Wm.,	31 S. Canal.
Greenlee Bros. & Co.,	227 to 231 W. 12th.
Greiner, Guido,	350 North Av.
Griffith, W. S., & Co.,	156 5th Av.
Gruen, Gustav,	80 Market.
Gruendel, Geo.,	31 S. Canal.
Gubbins & Barry,	343 to 347 S. Canal.
Haight & Walsh,	15 S. Canal.
Hainsworth, F., & Co.,	168 Adams.
Hart & Co.,	Arcade Court, rear 162 Clark.
Helmold, Julius F.,	52 Franklin.
Hercules Iron Works,	N. Canal, cor. Carroll Av.
Hogg, James,	87 W. Lake.
Holmes, Pyott & Co.,	13 N. Jefferson.
Humberstone, A. A.,	63 S. Canal.
Jeffrey, Thos. B.,	49 S. Canal.
Jelinek, A.,	335 S. Canal.
Kaestner, Chas., & Co.,	303 to 311 S. Canal.
Krause, F. W.,	76 W. Washington.
Krause, William,	126 Clark.
Lempuhl & Co.,	31 and 33 S. Canal.
Lloyd, Geo. E., & Co.,	200 Clark.
Link Belting Machinery Co.,	313 to 317 S. Clinton.
Lunde, Paul,	175 W. Chicago Av.
McFarron, Levy & Co.,	164 Indiana.
McKenzie, Hollenbeck & Lowe,	253 and 255 S. Clinton.
Malmgren, Chas. O.,	261 Randolph.
Mason & Davis,	347 Illinois.
Messer, Henry,	80 Market.

## CHICAGO—Continued.

Moody, W. F.	253 S. Canal.
Nelson & Erikson	80 Market.
Olson, Gustav	173 Illinois.
Ostrander & Huke	81 Jackson.
Peatie, John C.	60 Michigan.
Perkins, Henry C.	100 W. Blackhawk.
Plamondon, A. M'g Co.	57 to 67 S. Clinton.
Preble Machine Works Co.	38 and 40 W. Monroe.
Reedy, James W.	83 to 91 Illinois.
Rheydt, F.	80 Market.
Rochester Machinery M'g Co.	38 and 40 S. Canal.
Roth, McMahon & Co.	60 W. Washington.
Savage Bros.	42 and 44 Michigan.
Schmitz Bros.	224 Washington.
Schnitzer, W. & Bro.	54 and 56 Franklin.
Schreiber, A. E. & Co.	16 N. Canal.
Seoville, H. H.	51 and 53 W. Lake.
Seelig, Roman	558 Clybourn Av.
Severin & Emrath	88 5th Av.
Skorazinski, Nicholas	263 Randolph.
Snelson, W. H.	141 N. Halsted.
Spencer, John C.	412 W. Madison.
Springer, Warren	199 to 219 S. Canal.
Standard Machine Works	254 S. Clinton.
Stark, Louis	54 W. Washington.
Stenberg, John A., & Co.	261 Randolph.
Syrverson & Jensen	80 Market.
Tarrant, Robert	55 to 59 Michigan.
Their, James	72 W. Lake.
Union Brass M'g Co.	99 to 103 Ohio.
Vanderpool & Co.	477 W. 22d.
Vulcan Iron Works	86 N. Clinton.
Warner, Swasey	249 S. Canal.
Watson, L. H.	62 W. Lake.
Weir & Craig	2252 Archer Av.
White, Samuel K.	88 Market.
Wilson, Geo. W.	20 S. Jefferson.
Wood, Morris & Sons	31 S. Canal.
Wrigley, Thos.	14 Calhoun Pl.

## PLUMBERS, STEAM AND GAS FITTERS.

Alcock, Joseph R.	120 22d St.
Alles, Geo.	463 Division.
Alles, John	164 Lincoln Av.
Anderson, Mathew	73 Douglas Av.
Anderson, W.	73 35th.
Baggott, E.	132 5th Av.
Bain, D. & L.	645 W. Madison.
Bassett & Beaver	215 State.
Becker, Jacob	656 Sedgwick.
Becker, Peter	475 S. Halsted.
Bell & Co.	79 Douglas Av.
Bergener, August W.	236 31st.
Biedermann, E.	86 N. Clark.
Bischoff, F. A.	66 Webster Av.
Blake, John	635 State.
Blake, P. J.	752 W. Madison.
Boulton & Lott	39 W. Madison.
Bowden, Wm.	81 Dearborn.
Braun, H.	240 Osborn.
Breyer & Son	833 Milwaukee Av.
Breyer & Birney	72 W. Randolph.
Brooks, C. J. & Co.	427 W. Madison.
Brown, Wm.	349 Division.
Brown, William C.	368 W. Lake.
Brown Bros.	13 Arcade Court.
Buttorf & Boyd	42 Dearborn.
Burns, D. W.	120 22d.
Byrne, James J.	212 Blue Island Av.
Byrnes, Harry	204 Washington.
Campin, E.	84 16th.
Chappell & Wilbur	26 and 28 State.
Clausing, August	5 Mohawk.
Coffee Bros.	723 S. Halsted.
Conway, Michael	187 W. Van Buren.
Corboy, M. J.	104 and 106 Washington.
Craggs, W.	23 W. Madison.
Curtin, Jeremiah	657 43d St.
Daly & Matthews	120 Dearborn.
Danneils, Wm.	453 S. Canal.
Davis, John & Co.	69 to 79 Michigan.
Denniston, J. A.	148 N. Clark.
Desmond, Patrick C.	906 W. Lake.
Driscoll, John W.	115 18th.
Dunne & Co.	103 Monroe.
Faas, William	454 W. 12th.

## CHICAGO—Continued.

Foskett & Brown	196 Randolph.
Fraser & Goodridge	471 W. Indiana.
Garvey, J.	434 W. 12th.
Gay, W. F.	50 N. Clark.
Gillmore, Thomas J.	753 W. Madison.
Givney, Geo. B.	2818 State.
Gleason, Maurice	74 S. Halsted.
Graham, Richard	78 N. Clark.
Griffith, Robert	427 N. Clark.
Griffith, Watson	51 N. Wells.
Grotz, Remig.	229 S. Canal.
Gunderman, J. & Bros.	203 North Av.
Hallaren, James	2626 State.
Halpin & Co.	181½ Blue Island Av.
Halpin & Doheny	578 Blue Island Av.
Hamblin, John J.	366 Ogden Av.
Hanly, Daniel A.	241 W. Van Buren.
Hardin, D. & J.	217 31st.
Hartman, L. H.	2132 Archer Av.
Harvey, Patrick	427 State.
Hauslein, Geo.	1197 N. Halsted.
Havey, Thos.	1531 State.
Hay & Prentiss	34 and 36 S. Canal.
Haythorn, Wm.	22 S. Canal.
Hennessey & Cnty.	3229 State.
Herbert, Chas. J.	98 Randolph.
Herbst, Wm.	171 Milwaukee Av.
Herriott, W. J.	2820 Wabash Av.
Hickey, A. C.	10 S. Clinton.
Hills, Geo. W.	642 Van Buren.
Hogan, Joseph	184 W. Madison.
Humphrey, David	57 W. Lake.
Innes, Thomas	1729½ State.
Irons, A. F. & Co.	173 Madison.
Jack, David D.	871 W. Lake.
Kay, J. B.	108 23d.
Kelly, Thos. & Bros.	186 Dearborn.
Ketter, Jacob	357 Larrabee.
Klein, Stephen	642 Milwaukee Av.
Knobloch, Shannon	2999 Archer Av.
Kostlevy, Chas.	679 S. Halsted.
Kraefft, Theodore	424 W. Van Buren.
Krakon, E.	642 Milwaukee Av.
Kroeschell Bros.	2 to 12 Michigan.
Latto, Thomas	186 Randolph.
Lauder, A.	884 W. Madison.
Lampharter, H.	145 Michigan.
Lavery, John F.	3702 Cottage Grove Av.
Lester, F.	76 Van Buren.
Levi, Louis	4009 State.
Livingston, Simon	3213 State.
Lothian, W. F.	75 N. Wells.
Luckey, A.	284 Archer Av.
Lutz, W.	42 W. Chicago Av.
McCabe, P. H.	425 Webster Av.
McCulloch, Robert	63 S. Halsted.
McDonald, Michael C.	3793 Ogden Av.
McGinley, James	170 Clark.
McGinley, J. & Sons	108½ S. Desplaines.
McGraw, S. J.	362 Wabash.
McInnes & Downs	99 State.
McLaughlin, James	742 43d.
McMullen, Joseph	3441 S. Halsted.
Malvaney Bros.	203 Clark.
Matthews & Holt	85 Jackson.
May, Peter	445 N. Clark.
Meaney, Philip	2644 State.
Millar, R. M.	2815 Cottage Grove Av.
Mills, John & Son	9 N. Desplaines.
Monahan, James	3027 Cottage Grove Av.
Moylan, Martin	108 22d.
Mund, Hermann	375 Blue Island Av.
Murphy, J. C.	21 Blue Island Av.
Murray, Alex. W.	811 W. Madison.
Murray & Hennessy	47 W. Washington.
Nacey, Patrick	1209 State.
Nelson, John	87 W. Ohio.
Neustadt, Frederick	295 North Av.
Nolan & Enright	424 State.
O'Brien, C. J.	2756 Archer Av.
O'Brien, Edward	704 W. Lake.
O'Brien, Jos. P.	172 W. Indiana.
O'Brien, Napoleon S.	607 W. Lake.
O'Donnell, Robert V.	64 N. State.
O'Malley, Joseph	223 N. Wells.
O'Malley, Thomas	136 N. Clark.
O'Rorke, P.	2500 Archer Av.

## CHICAGO—Continued.

Oliphant, Walter.....	7 Aberdeen.
Oliphant & Liddell.....	288 W. Madison.
Olson, John B.....	61 Hubbard.
Patterson, Alfred.....	202 Clark.
Pattison, J. L. & Co.....	81 Randolph.
Pickett, John.....	341 Clark.
Pinter, Philip.....	660 N. Wells.
Poole, Samuel & Co.....	44 N. Wells.
Pope, Samuel I. & Co.....	193 Lake.
Powers & Clark.....	119 22d.
Rankin, W. & J.....	461 W. Madison.
Reetz Bros.....	226 Chicago Av.
Reilly, Joseph & Bro.....	501 W. Madison.
Robinson, Thos. E.....	566 S. Halsted.
Roche, George.....	3946 State.
Roche, James H.....	212 31st St.
Roche, Joseph P.....	696 W. Lake.
Rock, Daniel J.....	74 N. Clark.
Roland, John G.....	121 W. Randolph.
Ruh, Valentine.....	548 N. Wells.
Ryan, B.....	280 Wabash Av.
Ryan, John C.....	70 O'Brien.
Ryan Bros.....	581 Milwaukee Av.
Ryan, M. & Bro.....	464 Milwaukee Av.
Sanders Bros.....	505 State.
Sehell, Martin.....	414 26th.
Schuster, John.....	234 N. Clark.
Sherman & Bennett.....	2443 Archer Av.
Sims, W.....	287 W. Madison.
Sloan, M. C.....	57 Clark.
Sommers, R. & J.....	226 S. Canal.
Stokes, Geo. J.....	230 W. Randolph.
Tegtmeyer, E.....	124 Canalport Av.
Thielan, Peter.....	148 N. Clark.
Thompson, W. & E.....	85 Lake.
Tipple, Geo.....	689 Lincoln Av.
Urban & Uher.....	154 W. 12th.
Verity, W. S.....	229 W. Randolph.
Wade, J. J.....	537 W. Madison.
Walter, Charles.....	196 Blue Island Av.
Wardill, John D.....	3605 Cottage Grove Av.
Watson, A. H.....	432 Milwaukee Av.
Watson, James C. & Co.....	2469 Archer Av.
Watt, Hugh.....	220 Clark.
Watt, John M.....	2523 State.
Weber & Weppner.....	224 N. Clark.
Weir & Craig.....	2252 Archer Av.
Welch, James.....	410 Ogden Av.
Weller, Edward.....	3030 State.
Whiteford, D.....	346 W. Randolph.
Willems Bros.....	254 N. Clark.
Wilson & Conlin.....	3907 Cottage Grove Av.
Winnie & Co.....	35 and 37 S. Canal.
Winterburn, John H.....	53 W. Van Buren.
Woodard, John W.....	2459 Wabash Av.
Woodman & Warner.....	226 Lake.
Young, Andrew.....	965 W. Madison.

## PLUMBERS, STEAM AND GAS FITTERS' SUPPLIES, &amp;C.

Allyn, H. A. & Co.....	130 Lake.
Austin, H. W. & Co.....	175 and 177 Lake.
Bassett & Beaver.....	215 State.
Crow, Jas. B. & Son.....	212 and 214 Lake.
Coppins & Adams.....	130 Lake.
Crane Bros. M'fg Co.....	10 N. Jefferson.
Fieldhouse, Dutcher & Belden.....	30 W. Monroe.
Gair, John, & Co.....	67 and 69 S. Canal.
Garden City Lead Pipe and Sheet Lead Co.....	195 S. Clinton.
Hay & Prentiss.....	34 S. Canal.
Humphrey, David.....	57 W. Lake.
Johnson & Hover.....	116 S. Clinton.
Lally, H. T. & Co.....	245 Lake.
McDonald Bros.....	159 and 161 Lake.
National Tube Works Co.....	78 Market.
Phillips, Henry.....	206 Lasalle.
Rhoads & Ramsey.....	43 and 45 Franklin.
Sargent, Greenleaf & Brooks.....	504 Milwaukee Av.
Williamson & Schroeder.....	225 State.
Wilmarrth, H. M.....	103 W. Lake.
Wolf, L. Mfg. Co.....	226 and 228 Lake.
Woodman & Warner.....	

## RAILROAD SUPPLIES.

Brewer, J. S.....	156 and 158 Lake.
Brewster & Phelps.....	246 Clark.

## CHICAGO—Continued.

Crevar, Adams & Co.....	11 5th Av.
McCoun & Co.....	116 Washington.
Merrill F. Winston & Co.....	73 Dearborn.
Moore, S. H. & E. Y.....	163 Lake.
Morden & Houston.....	86 Pacific Av.
Pettibone & Mulliken.....	184 and 186 Washington.
Raynolds, C. T. & Co.....	21 Lake.
Schrader & Ellery.....	94 Washington.
Sellers, Morris & Co.....	6 Ashland Block.
Toppan, J. A.....	142 Dearborn.
Williams, J. S. & Co.....	179 Lake.
Willis, Clark W.....	45 Franklin.

## SAW MANUFACTURERS.

Chicago Saw and File Works.....	291 S. Canal.
Curtis & Co. Mfg. Co.....	40 Franklin.
Giles, W. W.....	69 N. State.
Moffatt, Albert.....	261 S. Clinton.
Monarch Lightning Saw Co.....	89 Metropolitan Block.
Sharpless, Samuel.....	15 Kingsbury.
Simonds M'fg Co.....	S. Canal, S. W. cor. W. Washington.
Simpson, John C.....	227 S. Canal.
Spaulding, N. W. & Bros.....	20 S. Canal.
Spencer, G. H. & Co.....	14 S. Halsted.
Sweet & Go.....	69 S. Canal.
United States Mfg. Co.....	46 Clarke.
Whitfield, John H.....	112 W. Van Buren.

## TOOL MANUFACTURERS.

Beaton, John.....	35 O'Brien.
Belicke, Gustav.....	159 Van Buren.
Calumet Tool Co.....	154 Lake.
Clifford & McGrath.....	82 Market.
Duffy Tool Co.....	226 Lake.
Forster, Joseph.....	356 5th Av.
Krantz, Theodore.....	16 N. Union.
Parish, Seneca.....	586 S. Canal.
Smith, E. K.....	224 Washington.
Smith & O'Leary.....	134 W. Lake.
Sutter, Geo. J.....	185 Van Buren.
Verona Tool Works.....	22 W. Lake.

## MISCELLANEOUS.

Aitchison, Robert, Perforated Metal Co.....	292 and 294 State.
American Cutlery Co.....	Mfrs. Cutlery.
177 Mather.	
American Grinding Mill Co.....	Mfr. Grinding Mills.
215 S. Canal.	
American Tube Works.....	Copper & Brass Tubes,
19 E. Lake.	
Andrews & Johnson.....	Iron Works,
75 Jackson.	
Barlow Lock Co.....	Mfrs. Locks,
80 Market.	
Barnum, W. E.....	Mfr. Sewing Machine Attachments.
140 W. Jackson.	
Barnum & Richardson Mfg. Co.....	Mfrs. Car
Wheels. 64 S. Jefferson.	
Bell, Harry K.....	Mfr. Files and Rasps.
36 W. Washington.	
Berlinger, W. L.....	Mfr. Cutlery.
218 Lake.	
Berry, J. H.....	Iron Shutters.
208 Lake.	
Besley, Chas. H.....	Brass & Copper Tubes,
175 Lake.	
Blatchford, E. W.....	Bar & Pig Lead,
cor. Clinton & Fulton.	
Blodgett, J. W.....	Mfr. Sewing Machines.
126 Dearborn.	
Braumoeller & Mueller.....	Mfrs. Iron Railings.
149 W. Van Buren.	
Cary & Moen.....	Mfrs. Steel Springs
170 Lake.	
Catlin, W. E. & Co.....	Mill Furnishers.
57 S. Canal.	
Chicago Car Wheel Co.....	Mfrs. Car Wheels.
15th, cor. Dearborn.	
Chicago Cutlery & Edge Tool Works.	
6 Calhoun.	
Chicago Drop Forging Co.....	14 Metropolitan Block.
Chicago Forge & Bolt Co.....	72 Lake.
Chicago Iron Bedstead M'fg Co.....	49 Wells.

**CHICAGO—Continued.**

Chicago Scale Co.,.....Mfrs. Scales.  
151 S. Jefferson.  
Chicago Steel Works.,.....806 Noble.  
Chicago Screw Co.,.....Mfrs. Screws.  
cor. Washington and Desplaines.  
Chicago Tack Co.,.....Mfrs. Tacks,  
110 Lake.  
Chicago Tyre & Spring Works.,.....123 Dearborn.  
Cleveland Rolling Mill Co.,.....91 Lake.  
Commeymer & Sayer.,.....Hot Air Pumps,  
20 W. Lake.  
Continental Bolt & Mfg. Works.,.....Michigan, S. W.  
cor. N. Franklin.  
Davis, G. M. & Co.,.....Mfrs. Gauges & Valves,  
15 S. Canal.  
Davis, John & Co.,.....Wrought Iron Pipe.  
75 Michigan.  
Dawson, James W.,.....Mfr. Cutlery.  
96 W. Harrison.  
Deane Steam Pump Co.,.....226 and 228 Lake.  
Diebold Safe & Lock Co.,.....57 State.  
Dobbins, Thos. S., Jr.,.....Mfr. Springs.  
1932 State.  
Doig, J. P.,.....Mfr. Files.  
45 W. Washington.  
Eldredge Sewing Machine Co.,.....Mfrs. Sewing  
Machines. 199 State.  
Ewart M'f'g Co.,.....Mfrs. Chains.  
109 Fulton.  
Excelsior Gas Light Co.,.....Portable Gas Works &  
Mfrs. Brass Goods, 122 Michigan.  
Forsyth Scale Co.,.....Mfrs. Scales.  
232 Lake.  
French, A., & Co.,.....Mfrs. Steel Springs  
5 Ashland Block.  
Garden City Mill Furnishing Co.,.....W. Washing-  
ton, S. W. cor. S. Clinton.  
Grain, John B.,.....Model Maker.  
87 W. Lake.  
Gilbert Lock Co.,.....Mfrs. Locks.  
99 Van Buren.  
Grant, John H., & Co.,.....Mfrs. Sewing Machine At-  
tachments. 248 Wabash Av.  
Hale, W. E., & Co.,.....Mfrs. Hydraulic Elevators.  
103 State.  
Harrington & Oglesby,.....Mfrs. Perforated Sheet  
Metals, 51 S. Jefferson.  
Harris, E. T., & Co.,.....Ornamental Metal Works.  
105 Monroe.  
Harris, Samuel H.,.....Mfr. Safes.  
103 W. Monroe.  
Hayes, S. J.,.....Illinois Central R. R.  
Higgins, John C.,.....Mfr. Mill Picks.  
165 W. Kinzie.  
Hock, W. P.,.....Mfr. Scales.  
80 N. Halsted.  
Holden, H. S.,.....Mfr. Files.  
65 S. 2nd.  
Holman, C. J.,.....Mfr. Springs.  
229 W. 12th.  
June M'f'g Co.,.....Mfrs. Sewing Machines.  
Erie, cor. Kingsbury.  
Kiely & Voss,.....Mfrs. Wire Goods,  
67 W. Monroe.  
Lantermann Bros.,.....Mfrs. Moulding Knives.  
253 S. Canal.  
Locke & Co.,.....Mfrs. Bolts,  
29 N. Jefferson.  
Marsh, J. P., & Co.,.....Mfrs. Steam Gauges,  
224 Washington.  
McDonald, A. J.,.....Mfr. Iron Pipe.  
26 Lake.  
Middleton, N. A., & Co.,.....Mfrs. Car Springs.  
142 Dearborn.  
Miller, Metcalf & Parkin,.....Steel Works.  
22 W. Lake.  
Moore, S. H. & E. Y.,.....Mfrs. Bolts & Nuts.  
163 Lake.  
Northampton Emery Wheel Co.,.....199 Lake.  
North Chicago Rolling Mill Co.,.....N. W. cor. La-  
salle and Randolph.  
North Chicago Screw Co.,.....Loomis, cor. W. Taylor.  
Nye & Palmer,.....Mfrs. Steam Pumps.  
73 W. Washington.  
O'Connell & Mahoney,.....Mfrs. Mill Picks.  
4 Dunn.

**CHICAGO—Continued.**

Patchell, Chas. S.,.....Mfr. Cutlery.  
6 Calhoun Pl.  
Plumsted, J. T.,.....Mfr. Springs.  
376 N. Water.  
Pugh & Co.,.....Mfrs. Car Wheels.  
115 Dearborn.  
Quimby, W. T. & Co.,.....Mfrs. Springs,  
14 N. Union.  
Randolph & Love,.....Mfrs. Gauges.  
25 Lake.  
Raymond, J. N.,.....Lead Pipe,  
55 W. Lake.  
Ryan, J. J. & Co.,.....Metal Works,  
59 Canal.  
Schreiber, A. E., & Co.,.....Mfrs. Iron Shutters.  
140 N. Desplaines.  
Shumway, Burgess & Co.,.....Mfrs. Bolts,  
cor. Michigan & Franklin.  
Sigwalt Sewing Machine Co.,.....Mfrs. Sewing Ma-  
chines. 367 Wabash Av.  
Silsby M'f'g Co.,.....Mfrs. Steam Engines.  
87 Clark.  
Taylor & Wachs,.....Mfrs. Chains.  
98 and 100 Indiana.  
Tuthill & Co.,.....Mfrs. Springs.  
51 S. Jefferson.  
Union Horse Nail Co.,.....Mfrs.,  
Ashland Av., nr. 22nd.  
Union Iron & Steel Co.,.....Rolling Mills.  
S. Ashland Av., nr. 31st.  
Union Knife Co.,.....Mfrs. Cutlery.  
78 Monroe.  
Wardell & Hickley,.....Manufacturers' Supplies  
14 S. Canal.  
Weaver, Joseph,.....Mfr. Chains.  
12 Lydia.  
Wilman, J. H.,.....Mfr. Springs.  
90 Randolph.  
Wilson, Wm.,.....Chicago & Alton R. R.

**CHILLICOTHE.**

Selin, John,.....Mfr. Plows  
**CLEMENT.**  
Kennedy, Geo.,.....Machinery.

**CLINTON.**

Davidson, F. C.,.....Mfr. Files.  
Walker, Enoch,.....Machinist.

**COLLINSVILLE.**

Blum & Schoettle,.....Bell Founders.  
Collinsville Zinc Works  
Lumaghi, Octavius,.....Zinc Works.  
Parks & Co.,.....Zinc Works.  
Wilson, O. B.,.....Bell Founder.

**COLUMBIA.**

Lutz & Bornermann,.....Machinery.  
Miller, P. W.,.....Mfr. Plows.

**COULTERSVILLE.**

Matthews, A. J.,.....Machinist.  
Miller, A.,.....Machinist.

**CRETE.**

Quackenbush, M. E.,.....Machinist.

**CULLOM.**

Unzicker, John,.....Machinist.

**DANVILLE.**

Berryman & Button,.....Machinists.  
Cooke, Allen,.....Chicago & Eastern Illinois R. R.  
Hovey, L. C.,.....Danville & South Western R. R.  
Stevens, W. B.,.....Boiler Maker.  
Stewart, Wm.,.....Machinist & Founder.  
Williams, R.,.....Gas Fitter.

**DECATUR.**

Ebert, John H. & Bro.,.....Copper & Iron Workers.  
Griffith, Nathaniel,.....Boiler Works.  
Kossmeyer & O'Neill,.....Gas Fitter.  
Loeb, Peter,.....Iron Founder.  
Masterson, Muller & Co.,.....Mfrs. Hoes.  
Muller, H.,.....Machinist.  
Oakes, W. L.,.....Boiler Maker & Machinist.  
Tait Bros. & Co.,.....Mfrs. Agri. Impts.  
Union Iron Works

**DEERFIELD.**

Stuckie, Wm.....Machinist.

**DIXON.**

Dixon Pipe & Pump Co.....Plumbers.  
 Grand Detour Plow Works,  
 Orvis Plow Co.  
 Stanley, John.....Mfr Files.  
 Waters & Knox.....Plumbers.

**DOVER.**

Pool, Warren.....Machinery.

**DU QUOIN.**

Blakeslee &amp; Bro.....Founders &amp; Machinists.

**DWIGHT.**

Kepplinger, Geo. J.....Iron Founder.

**EAST ST. LOUIS.**

East St. Louis Foundry.  
 Elliott, H. H.....R. R. & Machinists' Supplies.  
 St. Clare Industrial Works.....Iron Foundry.

**EATON.**

Barlow &amp; Bro.....Mfrs. Agri. Impts.

**EDWARDSVILLE.**

Desmond, Michael.....Machinist.  
 Noehr, E.....Machinist.

**EFFINGHAM.**

Schellenbach, John.....Iron Founder.

**ELGIN.**

Barr, O.....Mfr. Plows.  
 Clark, J. J. & Son.....Machinists.  
 Elgin, (The), Tubular Iron Tower Co.....Machinery.  
 Geister, H.....Mfr. Agl. Impts.  
 Jackman, R. P.....Founder & Machinist.  
 Mosely & Co.....Machinists.  
 Shepard, G. L.....Machinist.  
 Woodruff, G. H.....Iron Foundry.

**ELIDA.**

Hoyt &amp; Smith.....Machinists.

**ELKHORN GROVE.**

Woodin, D.....Mfr. Agl. Impts.

**ELLISON.**

Edwards, W. L. &amp; Co.....Mfrs. Plows.

**ELMIRA.**

Fuller, W. W.....Mfr. Agl. Impts.

**ELMWOOD.**

Phelps, W. E. &amp; Co.....Machinists &amp; Founders.

**ENGLEWOOD.**

Johnston Bros.....Plumbers.

**EVANSTON.**

Beck, Chas. & Co.....Plumbers.  
 Jennings, W. H.....Plumber.  
 Kay & Jennings.....Plumbers.  
 Leary, A. C.....Plumber.  
 McDougal Bros.....Plumbers.

**EVANSVILLE.**

Bambauer &amp; Rothmeyer.....Machinists.

**EVERGREEN PARK.**

Engestrom, Frank.....Machinist.

**FAIRBURY.**

Kring, L.....Iron Founder.

**FAYETTEVILLE.**

Wassen, Valentine.....Machinist.

**FOWLER.**

Novelty Iron Works.....Iron Foundry.  
 Stewart, J.....Machinist.

**FOXVILLE.**

Belt &amp; Clayborne.....Mfrs. Plows.

**FRANKFORT STATION.**

Stephens, E. C.....Machinist.

**FRANKLIN GROVE.**

Newton, E. W.....Mfr. Plows.

**FREEPORT.**

Barnes, W. G. & W.....Machinery  
 Barne, Mfg. Co.....Mfrs. Agl. Impts.  
 Freeport Malleable Iron Works.....  
 Klecht, C.....Machinist.  
 Morgan Bros.....Iron Founders.  
 Stover, D. C.....Machinist.  
 Stover Mfg. Co.....Machinists.

**GALENA.**

Wetswick, Robert.....Machinist.  
 Westwick, John & Sons.....Machinists & Founders.

**GALESBURG.**

Barnstead, W. J.....Gas Fitter.  
 Colton, G. D. & Co.....Founders & Machinists.  
 Colville, R.....Chicago, Burlington & Quincy R. R.  
 Frost Mfg. Co.....Iron Founders.  
 Jameson, S. W.....Boiler Maker.  
 Linden, Stephen.....Coppersmith.  
 Peterson, Thomas W.....Machinist.

**GALVA.**

Guthrie, Thos. D.....Founder &amp; Machinist.

**GENESEEO.**

Hammond &amp; Co.....Iron Foundry.

**GENEVA.**

Howell, W. H.....Iron Foundry.

**GILLESPIE.**

Burton, Chas. E.....Mfr. Drills.  
 Dickie, Wm.....Machinery.

**GILSON.**

West, Charles.....Machinist.

**GIRARD.**

Brand, Philip.....Machinist.

**GRAND CROSSING.**

Mason & Davis.....Iron Foundry.  
 Williamson, G. T. & Co.....Iron Foundry.

**GRAND TOWER.**

Smith, Hugh.....Grand Tower &amp; Carbondale R. R.

**GREENVIEW.**

McLain, N. W.....Machinist.

**GREENVILLE.**

Elam, J. &amp; Son.....Mfrs. Plows.

**GRIGGSVILLE.**

Bartlett, L. J.....Machinist.  
 Hutchinson, Samuel.....Machinist.

**HARVARD.**

O'Connor Bros.....Machinists.

**HAVANA.**

Dorrell &amp; Borgwelt.....Mfrs. Plows.

**HIGHLAND.**

Lentwiler, S.....Machinist.

**HIGHLAND PARK.**

Kenney, W.....Plumber.

**HOOPSTON.**

Corr &amp; Campbell.....Mfrs. Agl. Impts.

**HYDE PARK.**

Horne, Marshall.....Mfr. Agl. Impts.  
 Horne, W. T.....Plumber.  
 McDonnell, Chas.....Plumber.  
 Schmidt, Peter.....Plumber.  
 Western Steel Co.....

**IRONDALE.**

Brown, Jos. H. &amp; Co.....Iron &amp; Steel.

**JACKSONVILLE.**

Bambrook & Kaub.....Iron Founders.  
 Hoyt, J. E.....Boiler Maker.  
 Jacksonville Sulky Plow Works.....  
 Kelley, R. W.....Plumber.  
 McDonald, John & Son.....Plumbers.  
 Matthews, Geo. E.....Gas Fitter & Plumber.  
 Petrie, Ira F.....Jacksonville South Eastern R. R.  
 Thompson, A. C.....Plumber.

**JERSEYVILLE.**

Newton, R.....Machinist.

**JOLIET.**

Brooks & Co.....Plumbers.  
Gockley, H. L.....Machinist.  
Humphrey, Horace.....Iron Foundry  
Joliet Mfg. Co.....Mfrs. Agl. Impts.  
Kammerman, J.....Plumber.  
Sandeford, Wm.....Iron Foundry.  
Solar Stove Works.....Iron Foundry.

**JONESBORO.**

Cruse, Alexander.....Mfr. Plows.

**KANEVILLE.**

Meeks, Gilman.....Mfr. Plows.

**KANKAKEE.**

Benjamin, E.....Machinist.  
Woodruff & Beaumont.....Iron Foundry.

**KARBER'S RIDGE.**

Karber, F. C. & Bro.....Mfrs. Plows.

**KAITHSBURG.**

Stephens, James C.....Iron Foundry.

**KENNEY.**

Ruslig & Weakley.....Mfrs. Plows.

**KEWANEE.**

Kewanee Mfg. Co.....Mfrs. Agl. Impts.  
Perkins & Hays.....Mfrs. Agl. Impts.

**KINMUNDY.**

Chelfant, P.....Machinist.

**LAKE.**

Curtin & McDonough.....Plumbers.  
Johnston, W. & Bro.....Plumbers.  
McLaughlin, James.....Plumber.

**LAKE VIEW.**

Cookson Bros.....Machinists.  
Lake View Malleable Iron Works  
Schumacher, B. F.....Iron Foundry.

**LANARK.**

Snow, E. P. & Sons.....Iron Foundry.  
Weed, D. T.....Machinist  
Wood, J. D.....Machinist.

**LA SALLE.**

Matthiesson & Hegeler Zinc Co.

**LATHAM.**

Huffman, R. L.....Machinist

**LEMONT.**

Miller, Jacob.....Mfr. Plows.

**LENA.**

McCulloch, Calhoun & Co.....Machinists.

**LEWISTOWN.**

Cozine, Smith & Wilcoxon.....Machinists.

**LEXINGTON.**

Davis, Geo. W.....Mfr. Plows.  
Magill & Woodward.....Mfrs. Plows.

**LINCOLN.**

Braucher, Daniel L.....Machinist.  
Johnson, J. W.....Iron Foundry.  
Miller, G. C.....Iron Foundry.  
Morse, John.....Machinist.  
Sheer, John.....Mfr. Plows, etc.

**LITCHFIELD.**

Beindorf, W. M.....Machinist.  
Burdett, Edmond.....Machinist.  
Litchfield Car & Machine Co.

**LOCKPORT.**

Crique & Weirham.....Mfrs. Plows.

**McLEANSBOROUGH.**

Wright & Daly.....Machinery.

**MACOMB.**

Fisher & Bro.....Iron Foundry.  
Imes, W. L. & Co.....Mfrs. Plows.

**MARENGO.**

Deitz, James H.....Machinist.  
Kelly & Son.....Iron Foundry.  
Skinner, E. & Bro.....Mfrs. Plows.

**MARISSA.**

Guthrie, S. J.....Machinist.

**MAROA.**

Kent & Longstreet.....Mfrs. Thresh. Mach.  
Leavitt & Royal.....Machinery.

**MARSEILLES.**

Hurd, D.....Machinist.  
Marseilles Mfg. Co.....Mfrs. Agl. Impts.  
Moore & Shelrock.....Mfrs. Bolts.

**MASCOUTAH.**

Stemmler, Geo.....Machinist.

**MATTOON.**

Chuse, J. F. & Co.....Machinists.  
Burnell, Geo. B.....Plumber.  
Lennox, W. & Co.....Iron Foundry.  
Ranson, T. W.....Indianapolis & St. Louis R. R.  
Reilly, P.....Peoria, Decatur & Evansville Rwy.  
Sauborn & Ham.....Machinists.  
Tate, W. S.....Gas Fitter.

**MENDON.**

Darby, D. H.....Machinist.

**MENDOTA.**

Donahue & Madden.....Machinists

**METROPOLIS CITY.**

Shelton, Geo. & Co.....Iron Foundry.

**MILAN.**

Breitbeck, Wm.....Machinist.

**MILLBROOK.**

Budd, E.....Mfr. Agl. Impts.

**MILLEDGEVILLE.**

Spencer & Sons.....Machinists.

**MILLSTADT.**

Miller, F.....Mfr. Plows.

**MOLINE.**

Barnard & Leas Mfg. Co.....Mfrs. Mill Machinery.  
Cassell & McKeever.....Mfrs. Iron Shutters.  
Davis & Co.....Plumbers & Gas Fitters.  
Deere & Co.....Mfrs. Plows.  
Mattson & Bros.....Machinists.  
Moline Brass Works.....Brass Foundry.  
Moline Plow Co.....Mfrs. Plows.  
Moline Scale Co.....Mfrs.  
Moline Stove Co.....Mfrs.  
Schillinger & Trumble.....Boiler Makers.  
Union Malleable Iron Works.  
Williams, White & Co.....Iron Works.

**MONMOUTH.**

Barnstead, S. G.....Plumber.  
Hopper, W. L.....Mfr. Plows.  
Patee Plow Co.....Mfrs. Agl. Impts.  
Weir Plow Co.....Mfrs. Plows.

**MORRIS.**

Miller, H. L.....Mfr. Plows.

**MORRISON.**

Anan, Wm.....Machinist.  
Robinson, S. W.....Machinery.

**MORTON.**

Reel, P.....Iron Foundry.

**MOUNT CARMEL.**

Pool, James.....Machinist.

**MOUNT PULASKI.**

Whitney, John M.....Machinist.

**MOUNT VERNON.**

Houck & Hobbs.....Machinists.  
Sapp, Jacob.....Mfr. Plows.



**MURPHYSBORO.**

Alexander Bros.....Iron Foundry.  
Haywood & Co.....Coppersmiths.

**NAPERVILLE.**

Strous & Gestch.....Mfrs. Plows.

**NASHVILLE.**

Runk, J. L.....Mfr. Plows.  
Tunicliffe, John & Co.....Iron Foundry.

**NORTH AURORA.**

Sperry, David R. & Co.....Iron Foundry.

**NORTH EVANSTON.**

Pickett, John.....Plumber.

**OAKLEY.**

Ashba, Eli.....Machinist.

**O'FALLON.**

Remelius, R.....Machinery.

**OLNEY.**

Kinney & Bohren.....Machinists.  
Schill, Frank.....Machinist.

**OQUAWKA.**

Riner, Schell & Co.....Mfrs. Plows.

**OREGON.**

Vosburg & Wallace.....Iron Foundry.

**OTTAWA.**

Dewey Bros.....Iron Foundry.  
Duffey & Delano.....Machinists.  
King, Hamilton & Co.....Mfrs. Agl. Impls.  
Maierhoffer Mfg. Co.....Mfrs. Plows.  
Matheis, John.....Machinist.  
Mitchell & Coffey.....Boiler Makers.  
Novelty Machine Works.....Machinists.  
Stormont, Wm.....Iron Foundry.

**PALMER.**

Worth, W. J.....Machinist.

**PANA.**

Bernard, T. J.....Mfr. Files.  
Hawker, J. C.....Machinist.  
Woodward & Flood.....Iron Foundry.

**PARIS.**

Geohegan, Chas. J.....Iron Founder & Machinist.  
Henry Sudduth & Co.....Mfrs. Plows.  
Lavings, Chas. & Co.....Mfrs. Mill Machinery.  
Paris Edge Tool Co.....Mfrs. Edge Tools.  
Porter, Troy.....Plumber.  
Rees, Fred. W.....Iron Foundry.  
Sidduth, Henry.....Mfr. Plows.

**PECATONICA.**

Daly, T.....Machinist.

**PEKIN.**

Fogelsmark, O. E.....Steam & Gas Fitter.  
Frey & Co.....Machinists.  
Hodges, A. J. & Co.....Mfrs. Agl. Impls.  
Jaackle, H. A.....Gas Fitter.  
Lucas, Geo. H.....Gas Fitter.  
Smith, T. H. & Co.....Mfrs. Plows.  
Voth & Sackenruther.....Iron Foundry.  
Wyrich, P. & Co.....Mfrs. Agl. Impls.

**PEORIA.**

Baldwin, H. T.....Boiler Maker.  
Cummings & Emerson.....Iron, &c.  
Doheny, James.....Plumber & Gas Fitter.  
Eastman, J. E. & Co.....Boiler Works.  
Elder, Joseph.....Rock Island & Peoria Railway.  
Fogelmark & Lofgren.....Gas Fitters.  
Halligan, M.....Boiler Maker.  
Hart, Hitchcock & Co.....Machinists.  
Hurst, Dunn & Co.....Mfrs. Agl. Impls.  
Hunter, W. A. & Co.....Iron, &c.  
Keller & Mansfield.....Machinists.  
Kingman & Co.....Mfrs. Agl. Impls.  
Kinsey & Mahler.....Brass Founders.  
Klingel Bros.....Plumbers.  
Lucas, Adam.....Mfr. Safes.  
McAleenan & Cody.....Boiler Makers.

**PEORIA—Continued.**

McLaughlin, Frank.....Plumber.  
Maitland, W. B. & Co.....Boiler Makers.  
Martin, J. C. & Co.....Plumbers.  
Mosher & Armstrong.....Machinists.  
Nicol, Burr & Co.....Iron Foundry.  
O'Rourke & Co.....Mfrs. Plows.  
Peoria Plow Co.....Mfrs. Plows.  
Simpson, John M.....Brass Foundry.  
Somer, Frank.....Coppersmith.  
Steier, Louis.....Mfr. Files.  
Weddle & Co.....Iron, &c.

**PERCY STATION.**

Jones & Dawson.....Machinery.

**PERU.**

Brewster, Dodge & Huse.....Mfrs. Plows.  
Brunner, Chas.....Iron Foundry.  
Illinois Zinc Co.....Mfrs. Zinc & Spelter.

**PETERSBURGH.**

Bryant, W. W. & Son.....Mfrs. Plows.  
Stoker, A. W. & Co.....Iron Foundry.

**PITTSFIELD.**

Hardraker & Co.....Mfrs. Agl. Impls.  
Pittsfield Agl. Works.

**PONTIAC.**

Pillsbury, S. O.....Machinist.

**PRAIRIE CENTRE.**

Shaw & Ferrin.....Machinists.

**PRINCETON.**

Carter, G. A.....Mfr. Plows.  
Downer, H. J.....Gas Fitter.  
Glynn, John.....Gas Fitter.

**PROPHETSTOWN.**

Fenn, Wm.....Machinist.

**QUINCY.**

Barmier, B.....Machinist.  
Beckhaus, A. C.....Mfr. Files.  
Blatchley, C. E.....Plumber & Gas Fitter.  
Bonnet, Duffy & Co.....Stove Foundry.  
Bunting, J. A.....Plumber & Gas Fitter.  
Campbell, Wm.....Gas Fitter.  
Channon, Emery & Co.....Stove Foundry.  
Collins, W. H. & Co.....Mfrs. Plows.  
Excelstor Stove Works Co.....Stove Foundry.  
Gardner, R. W.....Mfr. Steam Governors.  
Greenleaf Mfg. Co.....Machinists.  
Grimm Bros.....Boiler Makers.  
Hagen, W. F.....Brass Foundry.  
Hague & Best.....Plumbers & Gas Fitters.  
Lemley Bros. & Co.....Iron, &c.  
Michelman, J. H.....Boiler Maker.  
Pfau, J. Louis Jr.....Iron Works.  
Pope, Baldwin & Co.....Mfrs. Agl. Impls.  
Rogers, W. T. & E. A.....Mfrs. Plows.  
Schwebel, Philip.....Machinist.  
Sien, Ernst.....Brass Foundry.  
Smith, Hill & Co.....Iron Foundry.  
Vandiver Corn Planter Co.....Mfrs. Agl. Impls.  
Vaughn, H. W.....Plumber & Gas Fitter.  
White, Thomas.....Stove Foundry.  
Williams, John.....Boiler Maker.  
Williams, John & Co Iron Founders & Machinists.  
Williamson, L. L.....Brass Foundry.

**RAVENSWOOD.**

Galloway, Albert.....Plumber.

**RED BUD.**

Whitchurch, Wm.....Mfr. Plows.

**RICHVIEW.**

Sproul, Wm.....Mfr. Plows.

**ROBINSON.**

Cantlon, Ogden & Morton.....Machinists.

**ROCHELLE.**

Bullock, H. E.....Iron Works.  
Byington & Northup.....Iron Foundry.

**ROCK FALLS.**

Batcheller & Son.....Mfrs. Agl. Impls.  
 Dyer, Fayette.....Mfr. Agl. Impls.  
 Eureka Mfg. Co.....Mfrs. Agl. Impls.  
 Keystone Mfg. Co.....Iron Foundry.  
 Taft Bros.....Machinists.  
 Todd, A. S.....Mfr. Cutlery.

**ROCKFORD.**

Barnes, W. F. & John.....Machinists  
 Briggs, Enoch & Co.....Mfrs. Plows.  
 Butterworth, Thos.....Gas Fitter.  
 Crawford & Upton.....Machinists.  
 De Camp, J. F.....Machinist.  
 Doyle, Margaret.....Foundry.  
 Emerson, Talcott & Co.....Mfrs. Agl. Impls.  
 Emerson & Co.....Mfrs. Reapers.  
 Forbes, A. D.....Mfr. Iron Castings.  
 Griffard, J.....Plumber.  
 Holly, S. T. & Son.....Machinists.  
 Jones, Woodruff & Co.....Machinists.  
 Knowlton Mfg. Co.....Mfrs. Reapers.  
 Manard & Bros.....Plumbers & Gas Fitters.  
 Manny, J. P.....Mfr. Agl. Impls.  
 Perry, Quinn & Co.....Mfrs. Tools.  
 Rockford Bolt Works.....Mfrs. Bolts.  
 Rockford Cutlery Co.....Mfrs. Cutlery.  
 Sames, P.....Mfr. Agl. Impls.  
 Skandia Plow Co.....Mfrs. Plows.  
 Thompson, Norman C.....Mfr. Reapers.  
 Trahern, W. D.....Iron Works.  
 Union Foundry & Machine Co.  
 Utter Mfg. Co.....Iron Foundry.  
 Ward, Franklin.....Iron Foundry.

**ROCK ISLAND.**

Buford, B. D. & Co.....Mfrs. Plows.  
 Cramer & Yerberry.....Plumbers.  
 Davis & Co.....Plumbers & Steam Fitters.  
 Donaldson, David.....Mfr. Saws.  
 Downing Bros.....Iron Foundry.  
 Haas, F.....Coppersmith.  
 Rock Island Plow Works.....Mfrs. Plows.  
 Rock Island Stove Co.....Stove Foundry.  
 Stewart & Montgomery.....Iron, &c.  
 Thompson, W. H.....Iron Foundry.  
 Wilson, B. M. & Son.....Plumbers.

**ROCKTON.**

Axe, W. R.....Machinist.  
 Widdowson, S.....Iron Foundry.

**ROSCOE.**

Richardson & Warner.....Mfrs. Plows.

**ROSEVILLE.**

Reed, Jos. G.....Machinery.  
 Roseville Mfg. Co.....Mfrs. Plows.

**SAINT CHARLES.**

Bignall, S. L. Hardware Co.....Foundry.  
 St. Charles File Co.....Mfrs.  
 Ward, Loomis.....Machinist.

**SALEM.**

Dursky, Geo. & Co.....Mfrs. Plows.  
 Merz, J. & Co.....Machinery.

**SANDWICH.**

Bloom, D.....Machinist.  
 Sandwich Enterprise Co.....Mfrs. Agl. Impls.  
 Sandwich Mfg. Co.....Founders & Machinists.

**SARATOGA.**

Kennedy, David.....Machinist.

**SAVANNA.**

Strausky, J. A.....Machinist.

**SHAWNEETOWN.**

Harbin & Bro.....Founders & Machinists.  
 Lackmeyer & Reddick.....Machinists.

**SHELBYVILLE.**

Hilsabeck, F. L.....Mfr. Plows.

**SHEFFIELD.**

Norton, O.....Machinist.

**SIGEL.**

Jaeger, F. W.....Mfr. Agl. Impls.

**SOUTH ELGIN.**

Gifford, James H.....Mfr. Agl. Impls.  
 South Elgin Hallelable Iron Co.  
 Teft, De Lacy & Larkin.....Iron Foundry.

**SPARTA.**

Burlingame, A. H.....Mfr. Plows.  
 Crothers, F. R.....Mfr. Plows.  
 Dickey & Bro.....Machinists.

**SPRINGFIELD.**

Drake & Palmer.....Boiler Makers.  
 Eastman, S. F. & Co.....Machinists.  
 Hanratty, Owen.....Plumber & Gas Fitter.  
 Hellwig & Snape.....Plumbers & Gas Fitters.  
 Ide, A. L.....Steam & Gas Fitter.  
 Johnson, J.....Wabash, St. Louis & Pacific R. R.  
 Lamb, John C.....Iron Founder & Machinist.  
 Post & Merriweather.....Mfrs. Plows.  
 Rippey, J. M.....Plumber.  
 Rippon, John.....Iron Foundry.  
 Springfield Iron Co.....Rolling Mill.

**STAUNTON.**

Kampe, Albert.....Mfr. Plows.

**STEELVILLE.**

Gray, J. M.....Mfr. Plows.

**STERLING.**

Covert & Mallory.....Iron Works.  
 Lacey, T. K. & Son.....Machinists.  
 Johnson, J. S.....Plumber.  
 Keystone Mfg. Co.....Iron Foundry.  
 Novelty Mfg. Co.....Mfrs. Agl. Impls.  
 Spies, Zandi & Co.....Mfrs. Agl. Impls.  
 Sterling Mfg. Co.....Mfrs. Agl. Impls.  
 Taft Bros.....Machinery.  
 Williams & Orton Mfg. Co.....Iron Foundry.

**STREATOR.**

Cook & Burtch.....Iron Foundry.  
 Grash & Heckman.....Machinists.  
 Graves, E. H. & Son.....Iron Founders & Machinists.  
 Grosh, T. J.....Iron Foundry.  
 Iwan Bros.....Mfrs. Plows.  
 Jones Bros.....Boiler Makers.  
 Morrison, J.....Mfr. Plows.  
 Mulford, C. C.....Gas Fitter.  
 Stout, Geo. H.....Steam Fitter.  
 Streater Wagon & Plow Works.....Mfrs. Plows.

**SUMMER HILL.**

Harris, James.....Mfr. Plows.

**SYCAMORE.**

Ellwood, R. Mfg. Co.....Mfrs. Agl. Impls.  
 Marsh, C. W. & W. W.....Mfrs. Plows.  
 Van Fleet, N. J.....Machinist.

**TAYLORVILLE.**

Sattley, M. & Bro.....Mfrs. Plows.

**TROY.**

Burk, Eli.....Mfr. Plows.

**UNION STOCK YARDS.**

McLaughlin, James.....Plumber.

**URBANA.**

Call, G. W.....Mfr. Plows.  
 Snedeker, A.....Machinist.  
 Wright, Thos. & Son.....Iron Foundry.

**VANDALIA.**

Gearhard, W. R.....Mfr. Agl. Impls.  
 Hafel, Anton.....Plumber.  
 Jerauld, H. F.....Iron Foundry.  
 Stolle, G. T.....Mfr. Plows.

**VERONA.**

Slosson, E. & E. C.....Founders & Machinists.

**VIENNA.**

Chapman, F. Jr.....Machinery.

**VIRDEN.**

Allen, Gray & Co.....Machinists.

**WARREN.**

Platt, J. A.....Machinist.

**WARSAW.**

Cress Bros. &amp; Co.....Mfrs. Plows.

**WATERLOO.**

Hony, Chas.....Machinist.

Oldendorph Bros.....Mfrs. Plows.

Wall, Louis.....Machinist.

**WAUCONDA.**

North, Alfred.....Iron Foundry.

**WAUKEGAN.**

Manney, F. H., Mfg. Co..... Mfrs. Agl. Impls.

Palmer &amp; Kerr.....Mfrs. Agl. Impls.

Wright, Wm.....Machinist

**WAVERLY.**

Turnbull, David.....Machinist.

**WENONA.**

Patch &amp; Swift.....Iron Foundry.

Taylor, John.....Machinist.

**WHITE HALL.**

Winn Bros.....Machinists.

**WINCHESTER.**

Markillie, J. H..... Mfr. Plows.

Morlidge, W. H.....Mfr. Plows.

Richards &amp; Bro.....Machinists.

**WOODSTOCK.**

Barrows, L. H. S.....Machinist.

**INDIANA.****ALBION.**

Baughman, D. C.....Founder and Engine Builder.

**ANDERSON.**

Anderson Foundry &amp; Machine Co.

Awalt, John A.....Mfr. Steam Gauges.

Hill, Jasper N.....Machinist.

**ALEXANDRIA.**

Burke, J. J.....Machinist.

**ANGOLA.**

Hildreth, W. W. &amp; Son.....Founders and Machinists.

Parish, O. W.....Iron Foundry.

**ATTICA.**

Banhart, S.....Iron Foundry.

Hass &amp; Harvey.....Mfrs. Plows.

Schuessler, John.....Machinist.

Smith, David.....Mfr. Plows.

**AUBURN.**

Morrell Bros. &amp; Co.....Iron Foundry.

**AURORA.**

Aurora Iron &amp; Nail Co.....Mfrs. Iron &amp; Nails.

Cobb's Iron &amp; Nail Co.

Excelsior Iron &amp; Copper Works.

Severin Bros.....Iron and Copper Works.

Severin, J.....Boiler Maker.

Stedman &amp; Co.....Iron Foundry.

**BELLMORE.**

Reid Bros.....Mfrs. Plows.

**BLOOMINGTON.**

Howe, Maxwell &amp; Co.....Mfrs. Plows.

Seward &amp; Co.....Iron Foundry.

**BLUFFTON.**

Arnold, Geo.....Iron Foundry.

Bluffton Machine Works.

Fox, John R.....Machinist.

Horton, T. &amp; Co.....Mfrs. Agl. Impls.

Peppard, I. H. &amp; Co.....Iron Foundry.

**BRAZIL.**

Central Iron &amp; Steel Co.

Crawford &amp; Crinion.....Founders and Machinists.

Menough Bros. &amp; Kolmeyer.....Iron Foundry.

Vanes, John.....Boiler Maker.

**BREMEN.**

Hadwin, W. A.....Machinist.

**BROOKVILLE.**

Brookville M'fg &amp; Repairing Co.....Machinists.

Horning, Lewis.....Machinist.

Klotz, Constantine.....Mfr. Plows.

Stalcup, W. P. &amp; Son.....Machinists.

**BUTLER.**

Leonard &amp; Stephens.....Iron Foundry.

**CAMBRIDGE CITY.**

Cambridge City Agricultural &amp; Machine Works...

Rummel &amp; Co.....Mfrs. Plows.

**CANNELTON.**

Lee, James &amp; Son.....Founders and Machinists.

**CHESTERTON.**

Blackwell, T.....Machinist.

**COCHRAN.**

Coulter, J. P.....Ohio &amp; Mississippi Railway.

**COLUMBUS.**

Busch, B.....Iron Foundry.

Busch, R. B.....Plumber.

Reeves &amp; Co.....Mfrs. Agricultural Implements.

Whitesides, Wm.....Millwright.

**CONNERSVILLE.**

Devor &amp; Hall.....Galvanized Iron Works.

Harrison, John I.....Machinery.

Roots, P. H. &amp; F. M.....Iron Foundry.

**COVINGTON.**

Dunkerly, Jos.....Iron Foundry.

McGregor, Thos. H.....Machinist.

**CRAWFORDSVILLE.**

Birch Bros.....Iron Foundry.

Brower Hay Tool Co.....Mfrs.

Fitchey, Geo. E.....Gas Fitter.

Lytle &amp; Smith.....Iron Foundry.

Wabash Machine Works.

**DELPHI.**

Kilgore, James W.....Machinery.

**DENVER.**

Barnes, Thomas O.....Machinist.

**DUBLIN.**

Dublin Agricultural Works.....Mfrs. Agricultural

Implements.

Morgan, Edmond.....Machinist.

**EAST GERMANTOWN.**

Condo, Adam &amp; Co.....Mfrs. Agr. Impls.

**EDINBURGH.**

Ward, J. &amp; J.....Machinists.

**ELKHART.**

Elkhart Car Works.

Ellis, J. S.....Machinist.

Forward &amp; Evans.....Iron Foundry.

Globe Agl. Impt. Works.

Pease, W. H.....Machinist.

**EVANSVILLE.**

Beauchamp, W. &amp; Co.....Iron, &amp; C.

Blemker, Tillman &amp; Co.....Iron Foundry.

Blount, H. F.....Mfr. Plows.

Browneller, Grayville &amp; Co.....Iron Foundry.

Clement, William.....Mfr. Files.

Coates, J. C.....Boiler Maker.

Crawford, A. &amp; Co.....Plumbers.

Crawford &amp; Bros.....Plumbers.

Evansville Foundry Association.

Evansville Iron &amp; Steel Co.

Evansville Novelty Machine Works.

Grote, F. &amp; Co.....Machinists.

Haney, John A.....Founder and Machinist.

Heilman, Wm.....Iron Foundry.

Heilman Plow Co.....Mfrs. Plow.

Hopkins &amp; Roberts.....Iron Foundry.

Kratz, C.....Machinist and Founder.

**EVANSVILLE—Continued.**

Kreipke, Chas. & Co.....Iron, &c.  
 Mesker, J. H. & Co.....Mfrs. Iron Railings.  
 Orr, Samuel & Co.....Iron and Steel.  
 Raber, Philip.....Gas Fitter.  
 Reitz, John A. & Co.....Machinists  
 Roelker, J. H. & Co.....Iron Foundry.  
 Rose, J. T. & Bro.....Mfrs. Plows.  
 Scantlin, Thos. & Son.....Iron Foundry.  
 Schrader, Fischer & Boehm.....Stove Foundry.  
 Schreiber, S.....Mfr. Safes.  
 Schultze, Thuman & Co.....Iron Foundry.  
 Seibert, Henry.....Mfr. Boilers.  
 Smith, J. C.....Mfr. Edge Tools.  
 Speer, W. F.....Machinist.  
 Stanfield & Bates.....Plumbers and Gas Fitters.  
 Turnock, W. C. & Co.....Brass Works.  
 Tuttle & Schwing.....Plumbers.  
 Wahneisler & Bell.....Plumbers.  
 Weichel, Louis.....Coppersmith.  
 Zins, Nicholas.....Machinist.

**FARMLAND.**

Robbins, G. W.....Machinery.

**FERDINAND.**

Kitten, F.....Mfr Threshing Machines.

**FORT BRANCH.**

Barnard, Wm.....Machinist.

**FORT WAYNE.**

Aultman, Miller & Co.....Mfrs. Agri Impts.  
 Ba-s, J. H.....Iron Foundry.  
 Base Foundry & Machine Works.  
 Coombs & Co.....Iron, &c.  
 Edgerton, J. K.....Steel Plow Works.  
 Hattersley, Alfred & Son.....Steam and Gas Fitters.  
 Keller, C. C.....Mfr. Files.  
 Kunkle, E. B.....Machinist.  
 McLachlar & Bowen.....Plumbers.  
 Morris, W. S.....Whitewater R. R.  
 Murray Kerr Mfg. Co.....Iron Foundry.  
 Ogden, Robert.....Plumber.  
 Olds, Chas. L. & Co.....Iron Foundry.  
 Pickard, T. R. & Sons.....Iron Foundry.  
 Ryan, Neal & Co.....Plumbers and Gas Fitters.  
 Wilson & Bro.....Mfrs Saws.  
 Wood, Jos.....Pennsylvania Co.

**FWLER.**

Messenger, P. B.....Machinist.

**FRANKFORT.**

Shaffer & Shaw.....Machinists.  
 Wallace & Kramer.....Machinists.

**FRANKLIN.**

Colton, Albert B.....Iron Foundry.  
 Sauer, Anton.....Iron Foundry.

**FREMONT.**

Vanalstine & Son.....Machinists.

**GOSHEN.**

Chapman, John.....Mfr. Cutlery.  
 Drake & Walker.....Mfrs. Iron Pumps.  
 Dugdale, W. P.....Machinist.  
 Hawks, J. P. & Son.....Mfrs. Cutlery.  
 Rowell, G. P. & Son.....Mfrs. Plows.  
 Thomas, Albright & Davis.....Iron Foundry.

**GREENCASTLE.**

Greencastle Foundry & Machine Co.  
 Greencastle Iron & Nail Co.  
 Houck, James.....Mfr. Plows.  
 Wilson & Son.....Iron Founders and Machinists.

**GREENFIELD.**

Abbott, J. R.....Machinist.

**GREENSBURG.**

Gaines, A. P.....Mfr. Plows.  
 Nagel, Robert.....Plumber.  
 Watson, R. H.....Machinist.

**HAGERSTOWN.**

Teeter, E. W.....Machinist.

**HARRISON.**

Rogers, W. H. & Son.....Iron Foundry.

**HOBART.**

Bowen, Henry & Bro.....Iron Foundry.

**HUNTINGTON.**

Cook & Speaker.....Machinists.  
 Dorn & Gemmer.....Iron Foundry.  
 Ross, A. J. & J. P.....Iron Foundry.

**INDIANAPOLIS.****MACHINISTS.**

Atlas Engine Works. Hetherington & Berner.  
 Castle & Hitchcock. Newcomb, Olsen & Co.  
 Chandler & Taylor. Nordyke & Marmon Co.  
 Dean Bros. Sinker, Davis & Co.  
 Eagle Machine Works. Vinton & Zscheck.

**PLUMBERS, STEAM AND GAS FITTERS.**

Aneshaensel & Strong. Gunn, Wm.  
 Clark, Michael F. Kearney, John.  
 Coulter, James. Keyser, G. W.  
 Donnelly, James P. Meikel, Chas. W.  
 Dunn, John C. Neal & Keyser.  
 Farrell, J. S. & Co. Ramsey, W. L. & Son.  
 Franklin Bros. Reising, Louis.  
 Freaney, W. J. Smith, J. Giles.

**MISCELLANEOUS.**

Althouse, Isaac.....Mfr. Edge Tools.  
 Atkins, E. C. & Co.....Mfrs. Saws.  
 Barry, W. H.....Mfr. Saws.  
 Buchanan, J. M.....Mfr. Plows.  
 Crossland, Jesse.....Mfr. Files.  
 Daws & McGettigan, E. R. Supplies & Machinery.  
 Fawcett, T.....Mfr. Saws.  
 Furst & Bradley Mfg. Co.....Mfrs. Agl. Impts.  
 Hadley, Wright & Co.....Machinery.  
 Hanson, Van Camp & Co.....Iron, &c.  
 Haugh, Ketcham & Co.....Mfrs. Iron Railings.  
 Holliday, W. J. & Co.....Iron, &c.  
 Indiana Foundry Co.  
 Indianapolis Car Mfg Co.  
 Indianapolis Rolling Mill Co.  
 Johnson, Danley & Co.....Mfrs. Agl. Impts.  
 Johnson Malleable Iron Co.....Mfrs. Iron, &c.  
 Knight & Jillson.....Plumbers' Supplies.  
 Langsenkamp, W.....Coppersmith.  
 McQuat & May.....Mfrs. Car Wheels.  
 Myer, W. P.....Sheet Metal.  
 Neulacher, Louis.....Bras. Founder.  
 Over, Ewald.....Iron Foundry.  
 Pioneer Brass Works.  
 Reagan, E. A. & Co.....Boiler Makers.  
 Richards & Butler.....Machinery.  
 Russell & Son.....Brass Foundry.  
 Seymour, Sabin & Co.....Mfrs. Agl. Impts.  
 Steinhauer, M.....Mfr. Files.  
 Unthank Plow Co.....Mfrs. Plows.  
 Vinton, Lindley.....Machinery.  
 Warren, B.....Indiana, Bloomington & Western Ry.  
 Weir Plow Co.....Mfrs. Plows.  
 Westphal, H. & Co.....Mfrs. Saws.  
 Wheeler, W. A.....Elbow Works.

**JASPER.**

Lambert, Felix.....Mfr. Plows.

**JEFFERSONVILLE.**

Anderson, C. C. & Son.....Iron Foundry.  
 Davis, H. J.....Plumber.  
 Howard, J. E. & Co.....Steamboat Builders.  
 Ohio Falls Car Co.  
 Perin & Gaff Mfg. Co.....Mfrs. Hdw.  
 Sweeney, M. A. & Bro.....Founders and Machinists.

**KENDALLVILLE.**

Flint, Walling & Co.....Iron Foundry

**KNIGHTSTOWN.**

Earl, Bending & Nipp.....Machinists.  
 Graf, G. P. & Co.....Mfrs. Plows.  
 Wilkins, J.....Iron Works.

**KOKOMO.**

Michener & Co.....Machinists.  
 Young & Chandler.....Iron Foundry.

**LA FAYETTE.**

Barnett, John.....Founder and Machinist.  
 Beach, Isaac L.....Iron and Steel.  
 Berg, Henry.....Gas Fitter.  
 Cunningham & Temple.....Machinists.  
 Harding, Barbee & Co.....Mfrs. Iron Railings.  
 La Fayette Car Works.  
 Lannert, J.....Galvanized Iron Works.  
 McGrath, Robert & Co.....Founders & Machinists.  
 Meitzler, W. & Co.....Plumbers.  
 Perry, T. H. & Bro.....Lake Erie & Western Ry.  
 Sellers, J. H. & Bro.....Machinists.  
 Temple, O. H. & Son.....Machinists.  
 Wallace, W. & Bro.....Plumbers and Gas Fitters.

**LA GRANGE.**

Bullock, W.....Iron Foundry.  
 Durand, G. A.....Iron Foundry.

**LA PORTE.**

Brooks, E. B.....Mill Machinery.  
 Haines, J. R.....Plumber.  
 Moore, Robert.....Plumber and Gas Fitter.  
 Rumeley, M. & J.....Machinists.  
 Seymour & Son.....Iron Foundry.  
 Travel, Chas.....Mfr. Plows.  
 Wendel Bros.....Machinists.

**LAUREL.**

O'Hair, James.....Iron Foundry.  
 Weir, Isaac.....Machinist.  
 Wilson, J. T.....Machinist.

**LAWRENCEBURG.**

Miami Stove Works.....Stove Foundry.

**LIBERTY.**

Rude Bros.....Mfrs. Agricultural Implements.

**LIGONIER.**

Gerber & Treash.....Iron Foundry.

**LIMA.**

Keith, G. P.....Machinist.

**LOGANSPOUT.**

Hughes, Daniel.....Plumber.  
 Knowlton & Dolan.....Founders and Machinists.  
 McAllister, A. U.....Machinist and Boiler Maker.  
 Meinshausen Bros.....Coppersmiths.  
 Stephens, A. W.....Plumber and Gas Fitter.  
 Tucker & Howe.....Machinists.  
 Woodworth, A. L.....Mfr. Mill Picks.

**MADISON.**

Braun, John G. Jr.....Plumber.  
 Dorsey, John.....Coppersmith.  
 Henry & Co.....Boiler Makers.  
 Powell & Meger.....Iron and Steel.  
 Stanley, H.....Machinist.  
 Stribbling & Walch.....Iron Foundry.  
 Walker, Charles.....Founder and Machinist.  
 Winter, N.....Boiler Maker.

**MARION.**

Hamilton, T. R. & Co.....Plumbers.  
 Hill, J. M.....Plumber.  
 Hulley, Jos.....Founder and Machinist.

**MARTINSVILLE.**

Theime, Chas.....Iron Foundry.

**MARYSVILLE.**

Harmon & Sons.....Machinists.

**METAMORA.**

Van Camp Plow M'fg Co.

**MICHIGAN CITY.**

Haskell & Barker Car Co.  
 Silsby, John.....Machinist.

**MIDDLETOWN.**

Miller, Isaac H.....Machinist.

**MILTON.**

Dorsey Machine Co.....Machinists.

**MISHAWAKA.**

St. Joseph Mfg. Co.....Founders and Mfrs. Plows.

**MOUNT VERNON.**

Brinkmawn, Henry.....Mfr. Plows.  
 Burtis, W. F.....Machinery.  
 Magill, R. & J. T.....Mfrs. Plows.  
 Woody & Keck.....Iron Foundry.

**MUNCIE.**

Dougherty, Peter.....Boiler Maker.  
 Miller & Kuhn.....Plumbers.  
 Mock Bros.....Mfrs. Agricultural Implements.  
 Russell, Wells & Brazier.....Iron Foundry.  
 Wysor, Haines & Co.....Iron Foundry.

**NEW ALBANY.**

Beck, G. W.....Mfr. Edge Tools.  
 Billings & Co.....Machinists.  
 Hegewald, John F. C.....Iron Foundry.  
 Hegewald, Chas. & Co.....Founders and Machinists.  
 Kuntz & Son.....Mfrs. Iron Railings.  
 Lemmon, A. & Son.....Brass Founders.  
 New Albany Rail Mill Co.  
 New Albany Steam Forge Works.  
 Ohio Falls Iron Works.  
 Plumer & Co.....Plumbers.  
 Terstegge, Gohman & Co.....Mfrs. Stoves.  
 Tyre, A.....Iron Foundry.  
 Walker & Mix.....Iron Foundry.  
 Web-ter & Pitt.....Engine Builders.  
 Zier, M. & Co.....Boiler Makers.

**NEWCASTLE.**

Newcastle Iron Works.  
 Tenant & Keiser.....Iron Founders.

**NEW HARMONY.**

New Harmony Machine Co.....Mfrs. Agl. Impts.

**NORTH MANCHESTER.**

Miller, J. E.....Iron Foundry.  
 Moe, A.....Machinist.

**NORTH VERNON.**

Picket, Jos.....Machinist.

**OAKTOWN.**

Blann & Potter.....Mfrs. Agl. Impls.

**OSGOOD.**

King, H. P.....Iron Foundry.

**PAOLI.**

Waldron, James P.....Millwright.

**PERRYSVILLE.**

Cumingore, H. S. & Son.....Iron Foundry.  
 Smith, F. S. & J. F. Jr.....Machinery.

**PERU.**

Beck & Riley.....Gas Fitters.  
 Dow, Benj. F. & Co.....Mfrs. Agl. Impls.  
 Lovatt Thos. F.....Founder and Machinist.  
 Smith, M. F.....Founder and Machinist.

**PLYMOUTH.**

Adams Chilled Plow Co.....Mfrs. Plows.

**PORTLAND.**

Jaqua, A. L.....Iron Foundry.  
 Moffitt & Sees.....Iron Foundry.

**RICHMOND.**

Bayliss, Vaughan & Co.....Machinists.  
 Byrnes, J. & Co.....Plumbers.  
 Cowbig & Co.....Boiler Makers.  
 Dills & McGuire.....Machinists.  
 Drewelins, C. H.....Plumber.  
 Drumm & Lent.....Mfrs. Files.  
 Farmer Mfg. Co.....Mfrs. Agl. Impts.  
 Foulke, W. W. & Co.....Iron, &c.  
 Gaar, Scott & Co.....Founders & Machinists.  
 Griffin, James F.....Gas Fitter.  
 Hawks, Geo. P.....Mfr. Files.  
 Hoosier Drill Co.  
 Hugon, J. E.....Mfr. Patent Governors.  
 Hunt, F. B. & Co.....Machinists.  
 Meerroff, H. H.....Plumber.  
 Morgan, T. F.....Plumber & Gas Fitter.  
 Patterson, E. & Co.....Mfrs. Plows.  
 Richmond Cutlery Co.....Mfrs. Cutlery.

**RICHMOND—Continued.**

Richmond Iron & Steel Co.  
 Richmond Machine Works.  
 Richmond Stove & Variety Iron Works.  
 Robinson & Co. .... Machinists.  
 Sinex Plow Co.  
 Starr, W. C. & Son. .... Mfrs. Chains.  
 Taylor, J. S. Jr. .... Iron, &c.  
 Wayne Agricultural Co. .... Mfrs. Agl. Impls.  
 Wefel, G. H. .... Plumber.  
 Weishaupt, Albert. .... Machinist.

**ROCHESTER.**

Ashton, F. M. .... Machinist.  
 Kewney, John .... Iron Foundry.  
 Ross & Glaze. .... Founders & Machinists.

**ROCKVILLE.**

McFadden, I. M. .... Machinist.

**RUSHVILLE.**

Nolan, Madden & Co. .... Iron Foundry.

**SALEM.**

Mobley, C. W. .... Machinist.

**SEYMOUR.**

Sifker, Wm. .... Iron Foundry.  
 Stringer, Joseph. .... Machinist.

**SHELBYVILLE.**

Harris, P. D. .... Machinist.

**SILVER LAKE.**

Jones & Hinkle. .... Machinists.

**SOUTH BEND.**

Asin, J. M. & Son. .... Machinists.  
 Baxter, P. & Co. .... Plumbers & Gas Fitters.  
 Birdsall Mfg. Co. .... Mfrs. Agl. Impls.  
 Bissell Chilled Plow Co. .... Mfrs. Plows.  
 Downs & Hoban. .... Plumbers.  
 Egbert, S. J. .... Iron Foundry.  
 Kirkman, J. & Co. .... Plumbers.  
 Matthews, Jonathan. .... Boiler Maker.  
 Meagher & Chapman. .... Iron Works.  
 Myser, John. .... Plumber.  
 Neufeldt, August. .... Mfr. Files.  
 Sibley & Ware. .... Machinists.  
 South Bend Chilled Plow Co. .... Mfrs. Plows.  
 South Bend Iron Works. .... Mfrs. Plows.  
 South Bend Malleable Iron Co.  
 Stephenson, A. T. & Sons. .... Plumbers.

**SPADES DEPOT.**

Steinfeld, J. H. & Bro. .... Machinery.

**TELL CITY.**

Clark, Thomas. .... Mfr. Plows.  
 Herman Bro. .... Mfrs. Agl. Impls.  
 Wedmer & Obuisier. .... Machinists.

**TERRE HAUTE.**

Barnard, J. G. .... Iron Foundry.  
 Carter, E. D. .... Terre Haute & Indianapolis R. R.  
 Cliff, Wm. & Son. .... Boiler Makers.  
 Cline, John. .... Mfr. Files.  
 Deeds, J. B. .... Machinist.  
 Dickinson, Henry. .... Brass Founder.  
 Ferguson, I. S. .... Plumber.  
 Gallagher, A. J. .... Gas Fitter.  
 Haggerty & Manion. .... Plumbers.  
 Hild, Henry. .... Boiler Maker.  
 Hooton, W. P. .... Plumber & Gas Fitter.  
 King, E. J. .... Stove Foundry.  
 Parker, J. A. & Co. .... Iron Foundry.  
 Phoenix Foundry & Machine Works.  
 Prox, Frank. .... Gas Fitter.  
 Reif, Adam Jr. .... Plumber & Gas Fitter.  
 Spracklin, M. J. .... Boiler Maker.  
 Terre Haute Car Mfg. Co.  
 Terre Haute Iron & Nail Works.  
 Vigo Iron Co. .... Mfrs. Iron.  
 Wabash Iron Co. .... Rolling Mill.  
 Watson, David W. .... Gas Fitter.  
 Wharry, Jas. .... Boiler Maker.

**UNION CITY.**

Knapp & Merkel. .... Plumbers & Gas Fitters.  
 Smith Bros. .... Machinists.

**VALPARAISO.**

Kellogg Bros. .... Iron Foundry.

**VERNON.**

Wagner, J. H. & Co. .... Iron Foundry.

**VEVAY.**

Goldenberg, C. & Son. .... Coppersmiths.

**VINCENNES.**

Anderson, J. J. .... Plumber.  
 Banks, J. C. .... Galvanized Iron Works.  
 Case, J. K. .... Machinist.  
 Clark & Buck. .... Iron Foundry.  
 Cune, M. .... Machinery.  
 Curry, Micha-l. .... Machinist.  
 Hartman, C. R. .... Mfr. Plows.  
 Johnson, L. .... Gas Fitter.  
 Vincennes Gas Fitting Co.  
 Vincennes Machine Works.

**WABASH.**

Green & Lawton. .... Machinis's.  
 Ross, A. J. & J. P. .... Iron Works.  
 Tinker, S. B. Cincinnati, Wabash & Michigan R. R.  
 Wilson, L. S. .... Machinist.

**WARSAW.**

Carter, Joseph. .... Machinist.  
 Eichor, John A. .... Steam & Gas Fitter.  
 Rouch, Reed & Hoyt. .... Machinists.  
 Smith, C. .... Founder & Machinist.

**WASHINGTON.**

Greenfield, A. .... Machinist.  
 McKernan, Hugh. .... Iron Foundry.

**WATERLOO.**

Kinsey Bros. .... Iron Foundry.

**WESTFIELD.**

Stout, G. W. .... Mfr. Plows.

**WEST LEBANON.**

Lost, Henry. .... Machinist.

**WILLIAMSBURG.**

Reynolds Bros. .... Machinists.

**WINAMAC.**

Brooks & Co. .... Machinists.

**WINCHESTER.**

Fitzmaurice, Wm. .... Machinist.

**WOLCOTTVILLE.**

Chase, S. E. .... Machinery.  
 Hardin, W. E. .... Iron Foundry.  
 Paulus & Yeager. .... Machinists.

**IOWA.****ACKLEY.**

Breuning & Ballhouse. .... Machinists.  
 Niland, H. F. .... Founder & Machinist.  
 Swartz & Cristen. .... Iron Foundry.

**AFTON.**

Thompson & Diver. .... Founders & Machinists.

**ALBIA.**

Adlow & Son. .... Founders & Machinists.  
 Garrett, J. M. & Co. .... Iron Foundry.  
 Terhune & Dawson. .... Founders & Machinists.

**ANAMOSA.**

Kimball, J. C. .... Founder & Machinist.

**APLINGTON.**

Roors & Alends. .... Founders & Machinists.

**ATLANTIC.**

Salisbury & Hammond. .... Iron Foundry.

**AVOCA.**

Jacobs, Bros. .... Founders & Machinists.

**BELLE PLAINE.**

Palmer, A. & Son.....Founders & Machinists  
Pierce Bros.....Founders & Machinists.

**BELLEVUE.**

Weygant, C.....Machinist.  
Whitmore, Daniel.....Machinist  
Wilson, Wm.....Iron Foundry.

**BELOIT.**

Aldrich Mfg. Co.....Machinists.

**BIRMINGHAM.**

Shott, S. B.....Mfr. Plows.

**BLOOMFIELD.**

Richards, J. E.....Machinist.

**BOONE.**

Weir, R. M.....Founder & Machinist.

**BOONESBORO'.**

Cummings & Fox.....Mfrs. Plows.

**BURLINGTON.**

Allen, C., Jr.....Plumber & Gas Fitter.  
Branagan, Wm.....Boiler Maker.  
Burlington Cutlery Co.....Mfrs. Cutlery.  
Dailey, John.....Boiler Maker.  
Donahue & McCleash.....Iron & Steel.  
Erringer, Henry.....Plumber & Gas Fitter.  
Fawcett, L. E.....Boiler Maker.  
Flodin, L. E.....Machinist.  
Funch & Hetzler.....Mfrs. Agl. Impts.  
Hillen, Frank.....Coppersmith.  
Murray Iron Works.....Founders & Machinists.  
Osterburg, M.....Copper Works.  
Pease, John S.....Plumber.  
Ray Plow Co.....Mfrs. Plows.  
Snowden, Thos.....Machinist.  
Stewart & Hayden.....Plumbers.  
West, Joel, Chicago, Burlington and Quincy R. R.  
Whittaker, James.....Iron Foundry.

**BUSH CREEK.**

Carpenter Bros.....Iron Foundry.

**CARSON.**

Van Brunt & Forrestall.....Machinery.

**CEDAR FALLS.**

Cropper, J. C.....Iron Foundry.  
Frink, T. L.....Machinist.  
Halverson, J.....Machinist.  
Munger, A. A. & Son.....Machinists.

**CEDAR RAPIDS.**

Adams, A. L.....Mfr. Tools.  
Bushnell, R. W.....Burlington, Cedar Rapids &  
Northern Railway.  
Cedar Rapids Foundry & Machine Co.  
Galligan, M. J.....Boiler Maker.  
Godson, Richard.....Gal. Iron Works.  
Hamilton, A. D.....Plumber.  
Home Mfg. Co.....Mfr. Agl. Impts.  
Larimer, E. K.....Iron.  
Leach, E. E.....Mfr. Anvils.  
Little, Henry.....Plumber.  
Messner & Co.....Plumbers.  
Miller, Henry F.....Plumber.  
Schmidt, Geo. R.....Machinist.  
St. John, G. B.....Iron Foundry.  
Sweet, J. F.....Machinist.  
Upton, J. J. & Co.....Mfrs. Agl. Impts.  
Vosburgh, R.....Iron Foundry.  
Western Rotary Plow Co.  
Whiting Bros. Mfg. Co.....Machinists.  
Williams Harvester Co.....Mfrs. Agl. Impts.

**CENTERVILLE.**

Wentworth & Wentworth.....Iron Foundry.

**CHARITON.**

Charlton Plow Co.....Mfrs. Plows.  
Hatcher, W. F. & Co.....Iron Foundry.

**CHARLES CITY**

Davis Bros.....Mfrs. Agl. Impts.  
Wilson, R. B.....Machinist.  
Wooley & Snyder.....Iron Foundry.

**CLARENCE.**

Wilcox, A. & Co.....Mfrs. Agl. Impts.

**CLARINDA.**

Olson, Oliver.....Iron Foundry.

**CLERMONT.**

Parker, J. L.....Iron Foundry.

**CLINTON.**

Baldwin Bros.....Iron & Steel.  
Frazer, T. J.....Machinist.  
Horsford, A. P.....Iron Foundry.  
Kendal, Geo.....Plumber.  
Owen & Harbrow.....Boiler Makers.  
Reeve, Thos. R.....Founder & Machinist.

**COLFAX.**

Morrison, M. D.....Mfr. Plows.

**CONRAD.**

Marnette, K. J.....Machinist.

**CORALVILLE.**

Davies, John.....Machinist.

**CORNING.**

Skinner, Bros.....Founders & Machinists.

**COUNCIL BLUFFS.**

Bixby & Wood.....Gas Fitters & Plumbers.  
Council Bluffs Iron Works.  
Hopkins, S. D. & S. J.....Machinists.  
Miller & Co.....Iron & Steel.  
Russell & Co.....Mfrs. Threshing Machines.  
Shugart Implement Co.....Mfrs. Agl. Impts.

**CRESCO.**

Swenson, Bros. & Co.....Founders & Machinists.

**CRESTON.**

Arnold, S. B. & Co.....Machinists.  
Eckerson, C. W.....Chicago, Burlington &  
Quincy R. R.  
Royce & Hopping.....Founders & Machinists.

**DAVENPORT.**

Davenport Brass Works.....Brass Foundry.  
Davenport Plow Co.....Mfrs. Plows.  
Davis, Jno. S. Sons.....Mfrs. Threshing Machines.  
Donahue, Michael.....Iron Foundry.  
Eagle Mfg. Co.....Mfrs. Agl. Impts.  
Ebl & Newman.....Founders & Machinists.  
Eyer, Peter.....Plumber.  
Grupe, D.....Boiler Works.  
Lamp, P. & Co.....Iron.  
Le Claire Foundry and Machine Shop.  
Lindsay & Cameron.....Plumbers.  
Moffatt, Wm.....Brass Foundry.  
Rowe, John.....Plumber.  
Schooner, H.....Machinists' Supplies.  
Schreiber, A.....Mfr. Files.  
Sieg & Williams.....Iron, &c.  
Sontag, H.....Plumber.  
Sternberg, W.....Iron Foundry.  
Stone, G. A.....Sheet Iron Worker.

**DECORAH.**

Smont, P. S.....Coppersmith.

**DENISON.**

Luney, Bros. & Co.....Iron Foundry.

**DES MOINES.**

Aulman & Turner.....Iron Works.  
Baldwin, G. W.....Mfr. Files.  
Benney, M. A.....Founder & Machinist.  
Burnside & Kehoe.....Plumbers.  
Des Moines Steam Boiler & Iron Works.  
Dexter Mfg. Co.....Mfrs. Paper Folding Machines.  
Eagle Iron Works.....Engine Builders.  
Ensminger & Tyler.....Boiler Makers.  
Given & Carpenter.....Mfrs. Plows.  
Green, Samuel.....Iron Foundry.  
Grups & Turner.....Boiler Makers.  
Hamilton, W. E. & Co.....Mill Machinery.  
Hill & Tetley.....Iron Foundry.  
Lang, James.....Plumber.  
Loughran & Hillis.....Iron Foundry.  
McDonnell, N. S. & Co.....Boiler Makers.  
McGrayel, J.....Des Moines & Fort Dodge R. R.

**DES MOINES—Continued.**

Morrison Bros. .... Plumbers' Supplies.  
 New England Plumbing, Steam & Gas Fitting Co.  
 Platt & Speith. .... Mfrs. Plows.  
 Robertson, L. .... Plumber.  
 Robinson & Atherton. .... Plumbers.  
 Ros, E. C. .... Brass Foundry.  
 Skinner, John. .... Mfr. Plows.  
 Turner, W. & R. .... Boiler Makers.  
 Walker, A. H. .... Plumber.  
 Walsh, N. E. .... Plumber & Gas Fitter.  
 Warner & Carrothers. .... Plumbers.  
 Wilson & Stern. .... Founders & Machinists.  
 Wright, J. H. .... Iron Works.

**DE WITT.**

Cummings, A. B. .... Iron Foundry.

**DUBUQUE.**

American Smelting Co. .... Brass Foundry.  
 Andrew Treadway & Sons. .... Iron, &c.  
 Bale, John. .... Plumber & Gas Fitter.  
 Chamberlain Plow Co. .... Mfrs. Plows.  
 Dean, Hopkins & McMurchy. .... Founders & Machinists.

Drees, Andrew. .... Brass Foundry.  
 Ewart, A. M. & Co. .... Steam Fitters.  
 Fleumken & Graham. .... Mfrs. Water Wheels.  
 Grow & Tyler. .... Machinists.  
 Hodge, O. F. .... Iron Foundry.  
 Iowa Iron Works Co. .... Founders & Machinists.  
 Key City Iron Works.

McDonald, A. Y. .... Plumber & Gas Fitter.  
 Marshall, Wm. .... Boiler Maker.  
 Mertz, Ferdinand. .... Founder & Machinist.  
 Meyer, C. H. .... Iron Foundry.  
 Morrison Bros. .... Plumbers & Gas Fitters.  
 Norwegian Plow Co. .... Mfrs. Plows.  
 Novelty Iron Works. .... Founders & Machinists.  
 Ogle, Joseph. .... Mfr. Files.  
 Schmidt, A. C. .... Founder & Machinist.  
 Schmidt, Conrad. .... Machinist.  
 Schreiber & Strinsky. .... Founders & Machinists.  
 Smith, Edward. .... Mfr. Plows.  
 Strinsky & Woodward. .... Machinists.  
 Vogel & Ferguson. .... Plumbers & Gas Fitters.  
 Westphal, Hinds & Co. .... Iron, &c.

**DURANT.**

Wolf, William. .... Machinist.

**ELKPORT.**

Schuepf, C. .... Machinery.

**EMMETSBURG.**

Skinner, R. B. .... Mfr. Plows.

**FAIR BANK.**

Wright, Robert T. .... Machinist.

**FAIRFIELD.**

Demarce, A. .... Iron Foundry.  
 Elliott & Thompson. .... Mfrs. Agl Impts.  
 Locke, David & Co. .... Mfrs. Agl. Impts.  
 Loudon Machinery Co.  
 Young, Daniel. .... Gas Fitter.

**FARMINGTON.**

Gillie, J. J. .... Machinist.

**FORT DODGE.**

Hewitt, G. A. .... Founder & Machinist.  
 Rich & Vincent. .... Iron Foundry.

**FORT MADISON.**

Gabelman, Chas. E. .... Iron Foundry.  
 Iowa Farming Tool Co.  
 Lamb, J. L. .... Fort Madison & North Western Ry.  
 Miller, F. G. .... Founder & Machinist.  
 Morrison Bros. .... Mfrs. Plows.

**GIRARD.**

Heffner, Jacob. .... Mfr. Plows.

**GLENWOOD.**

Sprague & Co. .... Iron Foundry.

**GLIDDEN.**

Lombard & Waldron. .... Machinists.

**GRINNELL.**

Stowe, S. .... Mfr. Plows.

**GUTHRIE CENTRE.**

Landis, John. .... Mfr. Plows.

**GUTTENBERG.**

Foerste & Bro. .... Machinists.

**HAMBURG.**

Hamburg Plow Co. .... Mfrs. Plows.  
 Hanson & Christian. .... Mfrs. Plows.  
 McKissick, J. F. .... Machinist.  
 Olson, O. .... Iron Foundry.  
 Squier, F. .... Founder & Machinist.  
 Taylor, D. S. .... Founder & Machinist.

**HAMPTON.**

Bontin, C. W. & Bro. .... Machinists.  
 Hampton Mfg. Co. .... Mfrs. Plows.  
 Pinkham, Higby & Co. .... Mfrs. Plows.

**HARTFORD.**

Roberts, A. .... Mfr. Plows.

**INDEPENDENCE.**

Independence Mfg Co. .... Mfrs. Agl. Impts.  
 Megow Bros. .... Iron Foundry.  
 Yeager & Co. .... Machinists.

**INDIANOLA.**

Fortney, Martin & Co. .... Machinists.

**IOWA CITY.**

Iowa City Cutlery Works. .... Mfrs. Cutlery.  
 Long, Edwin. .... Founder & Machinist.  
 Maher, Matthew. .... Plumber.  
 Murray & Mullen. .... Plumbers.  
 Pryce & Schell. .... Iron & Steel.  
 Tulloss, N. H. & Co. .... Founders & Machinists.

**JEFFERSON.**

Cline, J. B. .... Founder & Machinist.

**KELLOGG.**

Saum & Braley. .... Mfrs. Agl. Impts.

**KEOKUK.**

Andrus, Loeffler & Co. .... Machinists.  
 Bartlett, W. H. .... St. Louis, Keokuk & North Western R. R.  
 Bowden, T. & Son. .... Plumbers.  
 Busch, Jacob. .... Coppersmith.  
 Cherry & Corwine. .... Plumbers.  
 Comstock Stove Works. .... Stove Founders.  
 Cowley, H. C. .... Plumber.  
 Hanson, A. .... Plumber.  
 McElroy & Armitage. .... Founders & Machinists.  
 Ribbyn, Matthias. .... Machinist.  
 Stafford & Rix. .... Iron & Steel.  
 Sutton, R. P. & Co. .... Brass & Copper Works.

**KNOXVILLE.**

Bittenbender & Savage. .... Founders & Machinists.  
 Garretson, C. W. .... Iron Founder.  
 Hawkeye Iron Works.  
 Power, W. M. .... Iron Founder & Machinist.

**LANSING.**

Boeckh, Luger & Co. .... Iron Founders.

**LE CLAIRE.**

Weihe & Kattenacker. .... Iron Founders.

**LEHIGH.**

Libby & Zenbut. .... Founders & Machinists.

**LEON.**

Flanders, Chas E. .... Machinist.

**LISBON.**

Kynett Bros. .... Mfrs. Plows.  
 Rabenan, W. F. .... Machinist.

**LITTLE SIOUX.**

Silaby Bros. .... Machinists.



**LYONS.**

Cummings, P. M. .... Machinist.  
Frazier, T. J. .... Saw Mill Machinery.  
Maxfield, A. J. .... Plumber.  
Moerzinger, J. .... Iron Founder.  
Pelton, T. G. & A. M. .... Machinists.

**McGREGOR.**

Hellwig, John .... Machinist  
Keene, Geo. & Son .... Machinists.

**MANCHESTER.**

Wilson, J. P. .... Machinist.

**MAQUOKETA.**

Barnes Bros. .... Founders & Machinists.  
Flanders & Hammer .... Iron Founders.  
Hinman Bros. .... Iron Founders.  
Rich, E. D. .... Ma. hinist.  
Tridel, J. .... Iron Founder.

**MARENGO.**

Butterfield & Co. .... Iron Founders.

**MARSHALLTOWN.**

Anson & Carpenter .... Plumbers.  
Beebe, G. H. .... Machinist.  
Frederick, B. T. & Co. .... Iron Founders.  
Lennox, David. .... Machinist.  
McCarthy, W. F. .... Plumber & Gas Fitter.  
Player, John. .... Central Iowa Ry.  
Wilgus & Beebe. .... Machinist.

**MASON CITY.**

Crowe, G. H. .... Iron Works.

**MEDIAPOLIS.**

Hobbs, J. S. .... Machinist.

**MILFORD (Dickinson Co.)**

Chase, Geo. .... Machinist.  
Ketchum, Amos. .... Founder & Machinist.

**MONTEZUMA.**

Dellecallie, Peter .... Iron Founder.

**MONTICELLO.**

Chandler, John A. .... Iron Founder & Machinist.  
Little & Young. .... Plumbers.  
Prescott, W. M. .... Founder & Machinist.

**MONTOUR.**

Downs, W. A. .... Founder & Machinist.

**MOUNT PLEASANT.**

Gilchrist, J. R. .... Iron, etc.  
Prince, Chas. .... Machinist.  
Talley, Geo. A. .... Mfr. Plows.

**MOUNT VERNON.**

Mount Vernon Mfg. Co. .... Mfrs Agl. Impts.

**MURRAY.**

Hermance, H. B. .... Iron Works.  
Strawn & Hallam. .... Mfrs. Plows.

**MUSCATINE.**

Adams & Wiles. .... Mfrs. Plows.  
Baker, John. .... Boiler Maker.  
Barry N. & Son. .... Gas Fitters.  
Cole, J. N. .... Ma. hinist.  
Greeley, J. B. .... Machinist.  
Gunzenhauser, John G. .... Machinist.  
Kleinfelder, Jos. & Co. .... Founders & Machinists.  
Moore, H. W. .... Iron, etc.  
Nethlich, C. .... Mfr. Edge Tools.

**NASHUA.**

Bourey, J. M. .... Founder & Machinist.

**NEVADA.**

Hague, Alonzo. .... Iron Founder.

**NEWELL.**

Bunker & Co. .... Iron Founders.

**NEWTON.**

Durtot & Skou. .... Founders & Machinists.  
Lufkin, Albert. .... Machinist.  
Parsons & Bro. .... Mfrs. Plows.

**NORA SPRINGS.**

Briggs & Lathrop. .... Iron Founders.

**NORTH McGREGOR.**

Keene, Geo. & Son. .... Iron Founders.

**OAKLAND VALLEY.**

Baker, J. M. & Sons. .... Machinists.

**OELWEIN.**

Ellingwood, L. .... Machinist.

**OSAGE.**

Kelley & Morgan. .... Founders & Machinists.  
Morgan, J. E. B. & Co. .... Machinery.  
Osage Mfg. Works. .... Iron Founders.  
Woods, Chas. F. .... Machinery.

**OSCEOLA.**

Sutherland, D. G. .... Des Moines, Osceola & Southern R. R.

**OSKALOOSA.**

Currier Mill Machinery Co.  
Foehlinger, A. A. & Co. .... Machinists.  
Harrington, Harry. .... Founder.  
Iserman, M. .... Plumber.  
Johnson, Warren C. .... Founder & Machinist.  
Novelty Iron Works. .... Founders & Machinists.  
Seever, Thomas. .... Founder & Engine Builder.  
Smith, T. K. .... Plumber & Steam Fitter.  
Wilson, Geo. H. & Co. .... Mfrs. Plows.

**OSSIAN.**

Sawyer, R. N. .... Machinery.

**OTTUMWA.**

Flanders, J. P. .... Iron Founder.  
Han, Geo. & Co. .... Iron, etc.  
Hirschauer, P. .... Boiler Maker.  
Jones, E. .... Boiler Maker.  
Keister, Philip. .... Mfr. Plows.  
McDaniel, C. E. .... Boiler Maker.  
Nickerson, A. S. & Co. .... Plumbers.  
Ottumwa Iron Works.  
Rose & Bastian. .... Mfrs. Cutlery.  
Sheahan, John. .... Plumber.  
Western Machine Works.

**PANORA.**

Hogelin, S. L. .... Iron Founder.

**PARKERSBURG.**

Palmer & Memman. .... Machinists.

**PELLA.**

Pella Mfg. Co. .... Founders & Machinists.

**PROMISE CITY.**

Johnson, M. A. .... Founder & Machinist.  
Vale, I. .... Machinist.

**RED OAK.**

Brown, G. B. .... Machinist.  
Myrick, T. .... Plumber & Gas Fitter.

**ROCHESTER.**

Houk, M. .... Machinist.

**ROCKFORD.**

Curry, M. H. .... Machinist.

**SAC CITY.**

Wood, Thos. S. .... Founder & Machinist.

**SHAMBAUGH.**

Herriman, C. .... Machinist.

**SHENANDOAH.**

Oppenheimer Bros. .... Founders & Machinists.  
Shenandoah Mfg. Co. .... Mfrs. Augers.

**SHERRILLS MOUNT.**

Witter, Benj. .... Mfr. Plows.

**SIGOURNEY.**

Corey, A. .... Machinist.

**SIOUX CITY.**

Dennis, J. P. & Co.....Founders & Machinists.  
 Harding, L. G. & Co.....Boiler Makers.  
 Hogan, H. F.....Gas Fitter.  
 Honack, Hy., Jr.....Coppersmith.  
 Sioux City Plow Co.....Mfrs. Plows.

**SPENCER.**

Skinner, D.....Mfr. Plows.

**SPRINGBROOK.**

Gross, J. P. & Co.....Mfrs. Plows.

**SPRINGDALE.**

Baechelder, Geo. N.....Machinist.

**STATE CENTRE**

Stambaugh & Wentworth.....Mfrs. Plows.

**STEAMBOAT ROCK.**

Turner, D. W. & Co.....Machinists.

**STORM LAKE**

Brown, S. C.....Iron Founder.  
 Storm Lake Machine Shop.

**STRAWBERRY POINT.**

Chapman, G. A.....Machinist.

**TAMA CITY.**

Howe, J. W.....Machinist.  
 Tama Plow & Machine Works.

**TIPTON.**

Murray & Elliott.....Machinists.

**VAIL.**

Stone, John A.....Machinist.

**VINTON.**

Forrester, E. D.....Machinist.  
 Vanharen & Bro.....Machinists.

**WASHINGTON.**

Burgess, Jos.....Gas Fitter.  
 McPherson, C.....Machinist.  
 Wilde & Co.....Founders & Mfrs. Agrl. Impts.

**WATERLOO.**

Burkett, J. T.....Machinist.  
 Johnston & Co.....Mfrs. Plows.  
 Miller, G. W.....Iron Founder.  
 Robinson, W. S.....Iron Founder.

**WAUKON.**

Johnson, John S.....Machinist.

**WAVERLY.**

Russell, J. Q. A.....Iron Founder.

**WEBSTER CITY.**

Litchfield, L.....Iron Founder.  
 Rose, Robert.....Machinist.

**WEST POINT.**

Kile, Reuben.....Iron Founder.

**WEST UNION.**

Crosby & Hubbard.....Iron Founders.

**WIOTA.**

Turner, Joseph.....Machinist.

**KANSAS.****ABILENE.**

Whitehurst & Crumb.....Founders & Machinists.

**ATCHISON.**

Bostwick, O. F.....Machinist.  
 Boswell Bros.....Iron Works.  
 Boswell & Robinson.....Boiler Makers.  
 Highy, L.....Gasfitter & Machinist.  
 Kite & Bowen.....Plumbers.  
 Seaton & Lee.....Iron Founders.  
 Smarr, D. B.....Machinist.

**BELOIT.**

Darby, W. E.....Iron Founder.

**BLUE RAPIDS.**

Price Bros.....Iron Founders.

**CHEROKEE.**

Brigham Bros.....Machinists.

**CHETOPA.**

Torrence, John.....Iron Founder.

**COLUMBUS.**

Chappelle & Co.....Machinery.  
 O'Neil, James.....Lead & Zinc Works.

**EMPIRE CITY.**

Murphy & Brewster.....Lead & Zinc Works.

**EMPORIA.**

Bruner & Hogan.....Plumbers.  
 Jones, J. C., & Son.....Iron Founders.

**ENTERPRISE.**

Ehrsam, J. B.....Machinist.

**EUREKA.**

Decker, E. C.....Machinist.  
 Ingalls, A. P.....Machinist.

**FORT SCOTT.**

Burger, H.....St. Louis, Fort Scott & Wichita R. R.  
 Endicott, G.....Iron Works.  
 Fort Scott Foundry & Machine Works.  
 Walburn, A. W.....Iron Founder & Machinist.

**FRANKFORT.**

Reed, S.....Machinery.

**HIGHLAND.**

Bender & Bingman.....Machinists.

**HOLTON.**

Roberts, A.....Machinist.  
 Winneck, F.....Machinist.

**HUTCHINSON.**

Wilcox, E.....Iron Founder.

**IOLA.**

Iola Foundry & Machine Company.

**JEWELL CITY.**

Robertson, J. D.....Machinist.

**JUNCTION CITY.**

Cushing, P. M.....Machinist.

**LAWRENCE.**

Kimball Bros.....Iron Founders.  
 Lawrence Plow Co.....Mfrs Plows.  
 Ulrickson & Crum.....Plumbers & Gasfitters.

**LEAVENWORTH.**

Crowley, Dennis.....Plumber & Gasfitter.  
 Foley, James.....Plumber & Gasfitter.  
 Great Western Mfg. Co.....Engine Builders and  
 Machinists.

Great Western Stove Co.....Mfrs. Stoves & Machin'y.  
 Kauffman, Geo W. & Co.....Brass Founders.  
 Missouri Valley Bridge & Iron Works.  
 Newsome, Jos., & Sons.....Boiler Makers.  
 Union Machine Works.  
 Webster, T. F.....Mfr. Agrl. Impts.  
 Zeitz, Lawrence.....Coppersmith.

**LINCOLN.**

Edgett, O. W.....Machinery.

**MANHATTAN.**

Manhattan Machine Co.  
 Ulrich Bros.....Machinists.

**MARYSVILLE.**

Thompson, F. F.....Iron Founder.

**NEW PITTSBURG.**

Lanyon, Robert, & Co.....Zinc Workers.

**NEWTON.**

Walton, W. D.....Machinist.

**OLATHE**

Sylvester, C. O.....Iron Founder.

**OTTAWA.**

Clark, S. D.....Iron Founder &amp; Machinist.

**PARSONS.**

Crichton, Robert.....Iron Founder &amp; Machinist.

**PEABODY.**

Rockwell &amp; Seaton.....Iron Founders.

**ROSEDALE.**

Kansas City Rolling Mill Co.

Thor Iron Works.

**RUSSELL.**

Patterson &amp; Denham.....Mfrs. Agl Impls.

**SABETHA.**

Beam, J. C.....Machinist.

**SALINA.**Ball, H. O.....Machinist.  
Muir & Co.....Mfrs. Plows.**SENECA.**Butler, W. M.....Iron Founder.  
Matthews & Scoville.....Boiler Makers.**SHAWNEE.**

Kerran, Jas.....Machinist.

**TOPEKA.**Fromish, Joseph, & Co.....Boiler Makers.  
Capital Iron Works.

Cofran, R. L.....Iron Founder.

Eittrien, Ewart O.....Gasfitter.

Gogoll, A.....Gasfitter.

Lindenschmidt, Chas.....Founder.

McCarthy &amp; Stoddart.....Plumber.

Nunn &amp; Heap.....Steam Fitters.

Paine, Chas. R.....Machinist.

Purdy, O.....Boiler Maker.

Topeka Rolling Mill Co.

Walmsley, R.....Plumber.

Warren, A.....Plumber.

**WATERVILLE.**

Ostrander, W. H.....Machinist.

**WELLINGTON.**

Fisher, L. H.....Founder.

**WICHITA.**

McFarland, A.....Founder.

Price, E. F.....Machinist.

**WINFIELD.**

Barclay, F.....Gasfitter.

Crothers, C.....Mfr. Plows.

Clark, Samuel.....Machinist.

Magill &amp; Mater.....Iron Founders.

**KENTUCKY.****ALBANY.**

Hancock, B. F. F. &amp; Co.....Machinists.

**ASHLAND.**

Ashland Foundry &amp; Machine Works.

Norton Iron Works.

**BOWLING GREEN.**

Beece, J. C.....Plumber.

Brown, G.....Iron Founder.

Heminger, L. C.....Iron Founder.

**CARRSVILLE.**

Bettis, J. W.....Machinery.

**CATLETTSBURG.**

Dillon, John W.....Machinist.

Lanahan, W. N.....Stove Founder.

**COVINGTON.**

American Wire &amp; Screw Nail Co.....Mfrs. Nails.

Bogenschutz, Chas.....Stove Founder.

Bunning, W. B.....Plumber.

Covington Machine Works.

**COVINGTON—Continued.**

Finley, T.....Plumber.

Fort, A. S.....Plumber &amp; Gas Fitter.

Funk &amp; Palmer.....Mfrs. Plows.

Industrial Iron Works.....Engine Builders.

Licking Rolling Mill Co.

Martin &amp; Welling.....Iron Founders.

Mattingly, J. W. &amp; Co.....Machinists.

Meyers &amp; Collins.....Mfrs. Bell Punches.

Mitchell, Tranter &amp; Co.....Rolling Mill.

Nock, W. S.....Plumber.

Percival, J.....Iron, etc.

Rehfuss, John &amp; Son.....Machinists.

Stewart, R. C.....Iron Works.

**CYNTHIANA.**

Cromwell, H. F.....Mfr. Plows.

Slade, W. E.....Machinist.

**ELIZABETHTOWN.**

Robb, S. Chesapeake, Ohio &amp; South Western R. R.

**FLORENCE STATION.**

Houser &amp; Morrison.....Machinery.

**FRANKFORT.**

Davidson &amp; Williams.....Plumbers.

Ferguson, Meek &amp; Co.....Machinists.

Jones, Bros.....Plumbers.

Sage, J. L.....Plumber.

Shea, S. J.....Plumber.

Whitehead &amp; Shea.....Plumbers.

**GLASGOW.**

Pattillo &amp; Mingus.....Machinists.

**HENDERSON.**

Delvin &amp; Holloway.....Iron Founders.

Holloway &amp; Marshall.....Machinists.

**HOPKINSVILLE.**

Hanna, M. &amp; Co.....Iron Founders.

**LEVEE.**

Hainline, V. C.....Mfr. Plows.

**LEXINGTON.**

Davidson &amp; Williams.....Iron Founders.

Roche, J. M. &amp; Co.....Plumbers &amp; Gas Fitters.

Simcox &amp; Son.....Machinists.

**LOUISVILLE****IRON FOUNDERS.**

Aiken &amp; Drummond.....Main bet. 12th and 13th.

Baxter, J. G. &amp; Co.....13th &amp; Main.

Billings &amp; Bro.....721 E. Main.

Bridgeford &amp; Co.....30 6th.

Cochran, Ainslie &amp; Thurman, Main S. E. cor. 10th.

Fischer, Leaf &amp; Co.....High St. bet. 16th and 17th.

Grainger &amp; Co.....10th bet. Main and River.

Hobbs &amp; Co.....315 E. Main.

Kentucky Stove Co.....cor. 14th and Delaware.

Lithgow Mfg. Co.....Main fr. Hancock to Clay.

Long, Dennis &amp; Co.....9th bet. Main and River.

Meikle Thos. &amp; Co.....Monroe, 10th to 11th.

Merz Architectural Works.....74 W. Green.

Mullen, W.....1340 14th.

Scanlan &amp; Co.....20th and Portland Av.

Snead &amp; Bibb.....710 to 716 14th.

Snead &amp; Co., Iron Works.....813 to 839 W. Market.

Tilley, Jas. &amp; Co.....723 to 727 E. Main.

**MACHINISTS.**

Aiken &amp; Drummond.....Main bet. 12th and 13th.

Campbell, J. O. &amp; Sons.....216 to 220 1st.

Cochran, Ainslie &amp; Thurman, Main S. E. cor. 10th.

Faught, Deering Machine Works, 18th and Gar-

land Av.

Ferguson, Melcher &amp; Co.....1111 W. Main.

Frank, Ann.....322 Jackson.

Grainger &amp; Co.....10th bet. Main and River.

Illig, F.....312 1st.

Lawson, Thos.....76 W. Green.

Sanders, John F.....1123 W. Main.

Schweitzer, A.....420 Floyd.

Sulzer &amp; Vogt.....630 E. Jefferson.

Tilley &amp; Gray.....Market bet. Hancock &amp; Jackson.

**LOUISVILLE.—Continued.****PLUMBERS, STEAM AND GAS FITTERS.**

Ahrens, Walker & Ryan,	467 E. Market.
Ahrens & Ott,	429 W. Market.
Bennett, G.,	405 3d
Biedinger, H.,	768 E. Main.
Caulfield, C. I.,	519 W. 5th.
Duffy & Kosiol,	433 W. Market.
Hart, T. B.,	537 6th.
Hosch & Meyer,	211 Preston.
Huxley & Son,	237 W. Walnut.
Jalger & Bosemer,	327 W. Market.
Ludrigan, J. W. & Co.,	203 W. Chestnut.
Leader, Morris,	549 4th.
Matlack, W. H.,	633 4th.
Moellman, B.,	566 E. Green.
Morrison, Geo.,	410 3d.
O'Connor & Werst,	337 3d.
Ramsey, A. M.,	706 W. Market.
Randall, T. S.,	511 W. Walnut.
Schankel, P. C.,	560 E. Jefferson.
Schardein, F. S.,	536 W. Market.
Schmidt, E. C.,	229 W. Market.
Schulafer, Simon,	5th cor. Green.
Schulafer, L. & E.,	446 W. Jefferson.
Stickler, J. B.,	511 W. Walnut.
Strouse & Newman,	320 W. Green.
Vogel, P. A. & Son,	817 E. Market.
Zorn, Chas.,	1018 Preston.
Zorn, Geo.,	660 3d.

**MISCELLANEOUS.**

Ahrens & Ott,	Brass Founders,
429 W. Market.	
Avery, B. F. & Sons,	Mfrs. Plows,
cor Main and 15th.	
Bahr, Geo. B. & Co.,	Mfrs. Locks,
549 W. Market.	
Barbaroux & Co.,	Machinery,
139 3d.	
Beckman, Joseph,	Mfr. Shears,
31 W. Jefferson.	
Belknap, W. H. & Co.,	Iron and Steel,
115 to 121 W. Main.	
Brennan & Co.,	Mfrs. Agl. Impts.,
cor. Green and 8th.	
Brinley, Mills & Hardy,	Mfrs. Agl. Impts.,
348 to 368 Main.	
Carpenter, Annear & Co.,	Galvanized Iron Works,
46 9th.	
Central Rolling Mill Co.,	Brook and Washington.
Crucible Steel Casting and Metal Co.,	cor. 8th and
Water.	
Detroit Safe Co.,	Mfrs. Safes,
510 W. Main.	
Dillingham, W. H. & Co.,	Machinery,
143 W. Main.	
Dirkson, F.,	Mfr. Locks,
843 W. Market.	
Erwine, Jacob,	Mfr. Locks,
542 W. Market.	
Falls City Co-operative Millwrighting Co.,	147 10th.
Fletcher, Herman,	Machinery,
826 W. Main.	
Fowler & Co.,	Brass Founders,
211 Ninth.	
Frankel, H. U.,	Machinists Supplies,
151 3d.	
Gargan, John & Co.,	Copper Works,
34 5th.	
Genn J.,	Mfr. Files,
506 18th.	
Gilmore, Hite & Co.,	Railroad Supplies,
146 and 148 4th.	
Gouldings, John,	Mfr. Agl. Impts.,
216 1st.	
Grosz & Jenkins,	Mfrs. Locks,
353 3d.	
Haight, Robert,	Brass Founder,
177 W. Market.	
Ha's Safe and Lock Co.,	Mfrs. Safes,
451 Main.	
Hartill, Charles,	Mfr. Locks,
1007 Jefferson.	
Jones, Arthur,	Brass Founder,
146 5th.	
Jones, Ballard & Ballard,	Mfrs. Mill Machinery,
240 Linden.	

**LOUISVILLE.—Continued.**

Kaye & Co.,	Brass Founders,
32 Water.	
Kelly, W. C. & Co.,	Mfrs. Axes,
514 Portland Av.	
Kentucky Bell Co.,	Mfrs. Bells,
1607 Jackson.	
Kirkert, J. G.,	Millwright,
930 W. Main.	
Kochenrath, C. A.,	Mfr. Files,
311 E. Main.	
Louisville Car Wheel and Railway Supply Co.,	
1023 E. Jefferson.	
Louisville Chain Works,	1729 High Av.
Louisville Iron & Steel Works,	Clay St.
Louisville Steam Forge Co.,	6th and Shipp Av.
Martin, G. & Sons,	Mfrs. Bolts, etc.,
123 10th.	
Mayle, G. D.,	Mfr. Saws,
850 and 852 W. Main.	
Merkle, Thos. & Co.,	Mfrs. Agl. Impls,
Monroe, 10th to 11th.	
Middleron, H., Louisville, Cincinnati & Lexington.	
R. R.	
Mitchell, Thos.,	Boiler Maker,
1121 W. Main.	
Mitchell & Hebdun,	Boiler Makers,
312 11th.	
Pearce, J.,	Boiler Maker,
323 E. Main.	
Pohlmann Chas.,	Millwright,
915 E. Market.	
Pyne, W. T.,	Boiler Maker,
1107 W. Main.	
Ramsey, R. W.,	Boiler Maker,
S. W. cor. Main and Floyd.	
Semple, W. & A. C.,	Railroad Supplies,
244 W. Main.	
Speckman, H. P.,	Mfr. Locks,
325 W. Market.	
Sweeney, Patrick,	Brass Founder,
929 W. Main.	
Swenck, P. W.,	Galvanized Iron Works,
S. E. cor. Floyd and Main.	
Todd, Donigan Iron Co.,	Iron and Steel,
821 W. Main.	
Walton, Chas. J.,	Boiler Maker,
1219 W. Main.	
Wells, Reuben,	Louisville & Nashville R. R.
Williamson, John & Co.,	Brass Founders,
227 W. Market.	

**LUDLOW.**

Meahan, J.,	Cincinnati, New Orleans & Texas
Pacific Ry.	

**MAYSVILLE.**

Anderson, Chas. B.,	Iron, etc.
Ball, T. K.,	Mfr. Plows.
Cooper & Bissett,	Gas Fitters.
Cox & Poynter,	Mfrs. Plows.
Hall, Jas. H. & Co.,	Mfrs. Plows.
Oldham, S. B.,	Plumber.
Smith & Ryan,	Plumbers.

**MOUNT STERLING.**

Rogers, Ira,	Kentucky & South Atlantic R. R.
--------------	---------------------------------

**NEWPORT.**

Anchor Iron & Steel Works.	
Balmert, F. A.,	Plumber.
Buecker, Ernst,	Machinist.
Cincinnati & Newport Iron & Pipe Co.	
Dayton, T. M.,	Mfr. Bolts & Nuts.
McLean, James S.,	Plumber.
Nixon, James D.,	Gas Fitter.
Swift's Iron & Steel Works.	
White, Wm.,	Plumber & Gas Fitter.

**OWENSBORO.**

Carson, T. M. & Co.,	Plumbers.
Gable, H. M.,	Owensboro & Nashville R. R.
Guthrie, Long & Bransford,	Iron Founders.
McPherson & Drabelle,	Iron, etc.
York, Patrick & Co.,	Plumbers.

**PADUCAH.**

Frank, Aug. .... Coppersmith.  
Greif A. W. .... Mfr. Plows.  
Johnston, J. H. & Co. .... Iron Founders.  
Jones, E. T. .... Gas Fitter.  
Jones & Leonard. .... Boiler Makers.  
Linning & Jackson. .... Iron Founders.  
Love, W. L. .... Boiler Maker.  
Swann, B. W. .... Mfr. Plows.

**ROCK CASTLE.**

Standrod, D. W. .... Iron Founder.

**ROCKPORT.**

Torrance, Robert & Co. .... Iron Founders.

**SHELBYVILLE.**

Saunders, W. A. .... Machinist.

**LOUISIANA.****BATON ROUGE.**

McCabe, R. J. .... Plumber.

**BAYOU GOULA.**

Peltier, J. B. .... Machinist.

**CENTRELLE.**

Lear, James. .... Machinist.

**CLINTON.**

Rest, Henry. .... Sheet Iron Worker.

**FRANKLIN.**

Stow, Charles. .... Machinery.

**HARD TIMES LANDING.**

Horner, Geo. .... Machinery.

**JEANERETTE.**

Moresi, A. .... Machinery.

**NEW IBERIA.**

Honold, Chas. .... Machinist.

Lutzenberger, F. S. .... Founder.

Stott & Lutzenberger. .... Founders.

**NEW ORLEANS.****MACHINISTS.**

Blackadder, J. .... 331 Chippewa.  
Bonchaux, J. .... 49 S. Peter.  
Cessac, J. M. .... 11 Union.  
Cochran & Mims, S. Peters bet Gaennie & Erato.  
Fisher, John C. .... 145 S. Rampart.  
Hall, Thomas. .... 702 Tchoupitoulas.  
Ivens, Edm'd M. & Son, Eng'e Blds, 104 S. Peters.  
Johnson, Chas. G. .... 169 Tchoupitoulas.  
New Orleans Foundry & Machine Co., Tchoupitoulas bet Julia & St. Joseph.  
O'Sullivan, C. B. .... 106 Tchoupitoulas.  
Scheidecker, A. E. .... 75 Orleans

**PLUMBERS, STEAM AND GAS FITTERS.**

Aitkin, P. W. .... 85 S. Rampart.  
Applegate, M. H. .... 60 Camp.  
Barne, J. E. .... 172 Magazine.  
Barnwell, James. .... 224 Magazine.  
Bitters, H. .... N. Peters cor. Pauline.  
Boetter, H. .... 89 Baronne.  
Dameyer, Henry. .... 223 S. Rampart.  
Eckenbrecht, Wm. .... 191 Royal.  
Finan, John. .... 282½ Camp.  
Fleming, J. G. .... 350 St. Mary.  
Goodwin, Jas. .... 361 Thalia.  
Hartwell, C. C. .... 48 Baronne.  
Holm, Carl C. .... 348 Bourbon.  
Jordan, Richard. .... Gravier bet Delta & Front.  
Lee, James H. .... 131 Prytania.  
Loeffler, Julius. .... 43 Royal.  
Lowe, J. .... Valence bet Chestnut & Coliseum.  
Ludersbach, Louis. .... 178½ Poydras.  
McGinn, Michael. .... 262 Prytania.  
McKendric, Thos. & Co. .... 625 Magazine.  
Manion, Aitkin & Umache. .... 167 Baronne.  
Meisner, August. .... 182 Baronne.  
Mollo, A. .... 87 Royal.  
Parquette, J. J. .... 49 Chartres.  
Perault, John C. .... 55 Delta.

**NEW ORLEANS—Continued.**

Quinlan, P. H. .... 561 Magazine.  
Reynolds, James H. .... 802 Magazine.  
Roberts, Franklin. .... 226 Magazine.  
Schmidt, Rudolph. .... 99 Bourbon.  
Selby, Geo. .... 80 Carondelet.  
Snider, John. .... 241 Carondelet.  
Suhrens & Gromley. .... 70 Chartres.  
Sullivan & Bulger. .... 97 Camp.  
Toohey, Wm. .... 438 St. Charles.

**MISCELLANEOUS.**

Baumiller, J. .... Mfs. Iron Railings, 293 Dryades.  
Black, Pollock & Co., Iron, &c. .... 247 Magazine.  
Blochman, Reid. .... Clinton & Port Hudson R. R.  
Boland Bros., Machinery, cor. S. Peters & Notre Dame.  
Branch, Crooks & Co., Mfs. Circular Saws, 103 Gravier.  
Clark's Foundry. .... Tchoupitoulas cor. Race.  
Coleman, H. Dudley & Bro., Iron Foundry, Magnolia & Clara.  
Cushing, W. L., Machinery. .... 166 Gravier.  
Donald & McKenzie, Boiler Makers, 123 S. Front.  
Ebert, Wm., Ornamental Iron Works, 194 Magazine.  
Edwards, James D., Copper, Brass & Iron Works, 22 S. Front.  
Frederick, Hugo H., Coppersmith. .... 88 Julia.  
Golding, Wm., Iron Works. .... S. Peter cor. Delord.  
Hennessey, Jno & Bro., Cop'rsmith, 123 Magazine.  
Hohsmann, A. I., Iron Founder. .... 236 Magazine.  
Johnson, Lewis, Iron Founder, Julia cor. Water.  
Laycock & Co., Iron Founders. .... 257 S. Peters.  
Leeds & Co., Iron Fdrs. .... Delord cor. Constance.  
Lubben, John Jr., Coppersmith. .... 297 Magazine.  
McCan, D. C. & Son, Iron Founders, bet Notre Dame & Julia.  
Meher, J. E., Cop'r & Iron W'r, 171 Tchoupitoulas.  
Martens, Wm., Brass Founder, 203 Tchoupitoulas.  
Miller's Machinery Depot. .... 57 & 61 St. Charles St.  
Moore, Wm., Brass Founder. .... 173 Tchoupitoulas.  
O'Rourke, E. & J., Boiler Makers. .... 213 S. Peters.  
Purdy, W. H., Chicago, St. Louis & New Orleans R. R.  
Reynolds Iron W'ks, F'drs, Fulton cor. S. Market.  
Ruth, John, Boiler Maker. .... Julia cor. Delta.  
Schwartz, M. & Bro., Machinery. .... 149 Magazine.  
Shakespeare, Smith & Co., Iron Founders, 219 Girod.  
Sheehan, David, Coppersmith, Olivier bet Peter & Delaronde.  
Smith, W. H., Boiler Maker. .... 459 Third.  
Taylor, M. J., Sheet Iron Worker. .... 19 S. Front.  
Wall, Geo., Sheet Iron Worker, 149 Tchoupitoulas.  
Ward, John, Boiler Maker. .... 206 S. Peters.  
Wegner, Joseph, Iron Works. .... 75 Perdido.  
West, B. J. & Son, Machinery. .... 115 Magazine.

**PRAIRIE MER ROUGE.**

Davenport, C. C. .... Machinist.

**ST. JAMES STATION.**

Poirrier, O. M. .... Machinist.

**SHREVEPORT.**

Bacon, J. S. .... Machinist.  
Jones, T. W. .... Iron Founder.  
Utz & Smith. .... Machinery.

**THIBODEAUX.**

Hogan, P. .... Iron Founder.  
Jeffries, Thos. .... Iron Founder.  
Keefe & Bodley. .... Iron Founders.

**TRENTON.**

Duty, M. J. .... Machinist.

**MAINE.****ACTON.**

Bradford, Wilson. .... Mfr. Edge Tools.

**ALNA.**

Peaslee, John T. .... Mfr. Edge Tools.

**ANDOVER.**

Cushman, H. R. .... Mfr Tools.

**APPELTON.**

Messer, F. H. .... Mfr. Edge Tools.

**AUBURN.**

Auburn Iron Foundry Co.  
Auburn Valve Co.,.....Machinists.  
Chandler, L. S.,.....Machinist.  
Grose, Shaw & Co.,.....Steam Engine Builders.  
Joncas, Louis,.....Machinist.  
Jordan, F. M.,.....Steam Fitter.  
Jumper, Chas. H.,.....Machinist.

**AUGUSTA.**

Allen & Small,.....Machinists.  
Brooks, S. S. & Co.,.....Iron & Steel.  
Cross, Geo. H.,.....Gas Fitter.  
Gage, Wm.,.....Machinist.  
Gaslin & Cross,.....Plumbers & Gas Fitters.  
Harvey, H. H.,.....Mfr. Tools.  
Lambard, Thos.,.....Iron Founder.  
Mallett, Chas. H. & Co.,.....Mfrs. Tools.  
Moorlen, F.,.....Machinist.  
Taber, Henry A.,.....Plumber.  
Webber, J. C. & F. L.,.....Iron Founders.

**BANGOR.**

Allamby, Geo. T.,.....Brass Founder.  
Bangor Foundry & Machine Co.  
Bragg, N. H. & Sons,.....Iron & Steel.  
Burbank Jonathan,.....Gas Fitter.  
Cassidy, T. F.,.....Shipsmith.  
Clement, Samuel,.....Machinist.  
Collett, Job,.....Mfr. Files.  
Dole, Chas. C.,.....Gas Fitter.  
Getchell, Leighton & Co.,.....Plumbers.  
Gould, J. P.,.....Plumber.  
Harper, W.,.....Mfr. Files.  
Hincley & Eary Iron Co.,.....Machinists.  
Katahdin Iron Co.,.....Mfrs. Iron.  
Leighton, Davenport & Co.,.....Plumbers.  
Lynch, Michael,.....Brass Founder.  
Merritt, Josh. E.,.....Machinist.  
Nason, J. S.,.....Bangor & Piscataquis R. R.  
Peaks, W. M.,.....Gas Fitter.  
Peavey, C. A. & J. H.,.....Mfrs. Tools.  
Penobscot, River Steam Boiler Works.  
Philbrook, F. J.,.....Machinist.  
Schwartz, M.,.....Iron Founder.  
Webb & Nason,.....Mfrs. Edge Tools.  
Webber & Merritt,.....Machinists.  
Wood, Bishop & Co.,.....Iron Founders.

**BATH.**

Allen Jos. H. & Co.,.....Iron & Steel.  
Bailey, A. O.,.....European & North American R. R.  
Field, W. A.,.....Knox & Lincoln R. R.  
Gerry & Winslow,.....Plumbers.  
Hyde, T. W.,.....Iron Founder.  
Mawpel, A. J.,.....Iron Founder.  
Morrill, I. D.,.....Plumber.  
Moulton, Geo. Jr.,.....Machinist & Boiler Maker.  
Torry, F. B.,.....Brass & Iron Founder.  
Watson, S. J.,.....Plumber.  
Watson & Gannett,.....Plumbers.  
Watson & Mars,.....Brass Founders.  
Welch, Ezekiel H.,.....Gas Fitter.

**BELFAST.**

Belfast Foundry Co.  
Blodgett, Samuel A.,.....Shipsmith.  
Burgess, Albert C.,.....Iron & Steel.  
Hall, Cyrus J.,.....Iron Founder.  
Hardy, Geo.,.....Mfr. Edge Tools.  
Howard, Frank A.,.....Machinist.  
Kelly, B. & Co.,.....Mfr. Tools.  
Morison, E. J. & Co.,.....Iron & Steel.  
Pierce, A. K.,.....Gas Fitter.  
Read, Geo. T.,.....Machinist.  
Tibbets, C. E.,.....Machinist.  
Wight, Geo. E.,.....Shipsmith.

**BELGRADE.**

Pray, C. M.,.....Machinist.

**BERWICK.**

Higley, Eben N.,.....Machinist.

**BIDDEFORD.**

Biddeford Machine Works.  
Bond, Geo. W.,.....Brass Founder.  
Brodigan, Lawrence,.....Mfr. Files.

**BIDDEFORD—Continued.**

Burnham, Jno. H.,.....Iron Founder.  
Dudley, B. F.,.....Plumber.  
Hardy Machine Co.,.....Machinists.  
Hatch, Geo. W.,.....Mfr. Edge Tools.  
Kelly, John P.,.....Machinist.  
Portland Co-operative Stove Foundry.  
Saco Water Power Machine Shop.  
Stafford, J. A.,.....Gas Fitter.

**BINGHAM.**

Baker, C. M. & A.,.....Mfrs. Edge Tools.

**BOOTHBAY.**

McClintock, W. G.,.....Machinist.

**BOWDOIN CENTRE.**

Snow, W. E.,.....Mfr. Agl. Impt.

**BOWDOINHAM.**

William, S. J.,.....Mfr. Agl. Impts.

**BREWER.**

Bradbury, R.,.....Machinist.

**BRIDGTON.**

Bailey, Osgood,.....Machinist.  
Bailey, R. T.,.....Machinist.  
Bridgton Foundry & Machine Shop.  
Cannon, L.,.....Machinist.  
Caswell, M. M.,.....Machinist.

**BRIGHTON.**

Strickland, Asa,.....Mfr. Edge Tools.

**BROWNFIELD.**

Bean, Eli B.,.....Mfr. Agl. Impts.

**BRUNSWICK.**

Furbish, John,.....Mfr. Agl. Impts.  
Purinton, Frank H.,.....Machinist.

**BUCKSPORT.**

Smith, W. G.,.....Machinist.

**BURLINGTON.**

Peavy, Warren,.....Mfr. Edge Tools.

**CALAIS.**

Crangle Bros.,.....Machinists.  
Kelley, P. C.,.....Boiler Maker.  
Leathan, John P.,.....Plumber & Gas Fitter.  
Livingston, James,.....Shipsmith.  
McCullough & Tate,.....Iron Founders.  
McDonald, Wm. & Son,.....Machinists.  
Sayton, W. E.,.....Iron Founder.

**CAMDEN.**

Alden, H. E. & W. G.,.....Mfrs. Anchors.  
Barstow, Chas. M.,.....Machinist.  
Knowlton Bros.,.....Founders & Machinists.

**CANTON.**

Barrows, A. & R. A.,.....Iron Founders.  
Thomas, Geo. V.,.....Machinist.

**CENTRE MONTVILLE.**

Bryant, Alonzo,.....Mfr. Agl. Impts.

**CERRYFIELD.**

Kelley, James,.....Mfr. Edge Tools.  
Wakefield, G. W. & Son,.....Founders & Machinists.

**CHESTERVILLE.**

Brown, Orlando,.....Mfr. Edge Tools.

**CHINA.**

Lewis, Jabez & Henry,.....Mfrs. Plows.

**CLINTON.**

Billings, J. P.,.....Mfr. Edge Tools.

**CORINNA.**

Corinna Foundry Co.  
Nutter, G. W.,.....Iron Founder.

**CORINTH.**

Chandler, Moses,.....Mfr. Agl. Impts.

**DAYTON.**

Staples, James W.....Machinist.  
Staples, Z. G.,.....Mfr. Agl. Impts.

**DEDHAM.**

Withee, H. J.,.....Machinist.

**DEER ISLE.**

Lufkin H. T.,.....Mfr. Agl. Impts.  
Parker, Jas.,.....Machinist.

**DEXTER.**

Dustin, Nathaniel & Co.,.....Machinists.  
Fay & Scott,.....Machinists.  
Thompson, Benj. C.,.....Mfr. Edge Tools.  
Webber, A. L.,.....Machinists Tools & Supplies.

**DIXFIELD.**

Field, W. A.,.....Machinist.  
Truman, C. C.,.....Machinist.

**DOVER.**

Smith, C. C.,.....Machinist.

**DURHAM.**

Goddard, Silas,.....Mfr. Plows.

**EAST JEFFERSON.**

Page, Moses,.....Machinist.

**EAST LIVERMORE.**

Allen, Albert,.....Machinist.

**EAST MACHIAS.**

Seavey, C. H.,.....Mfr. Edge Tools.

**EAST MADISON.**

Hobart, J. W.,.....Mfr. Agl. Impts.

**EAST VASSALBORO.**

Doe, Hiram,.....Mfr. Plows.

**ELLSWORTH.**

Campbell, A. S.,.....Mfr. Edge Tools.  
Davis, Jas. F.,.....Iron, &c.  
McDonald, W. O.,.....Machinist.

**EUREKA.**

Waite, Silas N.,.....Machinist.

**EUSTIS.**

Bean, J. W.,.....Machinist.  
Hutchins, F.,.....Machinist.  
Jones, G. W.,.....Machinist.

**FAIRFIELD.**

Foss, J. R.,.....Founder & Machinist.

**FARMINGTON.**

Morton, R. L.,.....Mfr. Plows.  
Russell, I. K.,.....Machinist.  
Will, Geo. H.,.....Machinist.

**FARMINGTON FALLS.**

Folger, B. F.,.....Iron Founder.

**FAYETTE.**

Dunn Edge Tool Co.,.....Mfrs. Edge Tools.

**FOXCROFT.**

Davis & Gethnes,.....Mfrs. Agl. Impts.  
Mayo, J. B. & J. G.,.....Mfrs. Plows, &c.  
Piscataquis Iron Foundry.

**FREEPORT.**

Merrill, J. P.,.....Machinist.

**GARDINER.**

Atwood, E. W.,.....Machinist.  
Holmes, Philip C. & Co.,.....Iron Founders.  
Lawson, Geo.,.....Mfr. Files.  
Luce, S. B.,.....Machinist.  
Perry, Joseph & Co.,.....Machinists.  
Robins, C. A. & Sons,.....Iron Founders.  
Scribner, Harvey,.....Machinist.  
Wentworth Spring & Axle Co.,.....Mfrs. Springs.  
Wentworth, H. M.,.....Mfr. Bolts & Nuts.  
Whitney, B. D.,.....Machinery.

**GARLAND.**

Reed, Nicholas G.,.....Machinery.

**GORHAM.**

Gammon, Elden,.....Machinist.  
Ridgway, Samuel,.....Mfr. Files.

**GRAY.**

Edwards, G. M.,.....Machinist.  
Newbegin, John,.....Mfr. Edge Tools.

**GREENBUSH.**

Weld, Moses,.....Mfr. Edge Tools.

**GREENFIELD.**

Given, A. N.,.....Mfr. Edge Tools.  
Mann, L. P.,.....Machinist.

**GREENVILLE.**

Smith, Joel,.....Mfr. Edge Tools.

**GUILFORD.**

Hussey, Erastus,.....Machinery.

**HALLOWELL.**

Fuller's, Geo. Sons,.....Iron Founders.  
McClinch, I. Frank,.....Machinist.

**HARRISON.**

Ricker, T. H. & Sons,.....Founders & Machinists.

**HARTLAND.**

Moor, Walter,.....Machinist.

**HODGDON.**

Bradbury, Daniel J.,.....Machinist.

**HOULTON.**

Getchell, John S & Son,.....Iron Founders.

**KENDUSKEAG.**

Beath, W. H.,.....Mfr. Edge Tools.  
Higgins, Wm.,.....Mfr. Agl. Impts.  
Palmer, V. S.,.....Iron Foundry.

**KENNEBUNK.**

Leach, Geo.,.....Machinist.  
Varney, Geo.,.....Mfr. Plows.

**KENNEBUNKPORT.**

Torrey, Geo. L.,.....Brass Founder.

**KINGFIELD.**

Dolbier, Wm.,.....Machinist.  
Landers, H. P.,.....Mfr. Agl. Impts.

**LA GRANGE.**

Doble, Benj. W.,.....Mfr. Edge Tools.  
Haskell, G. G.,.....Mfr. Edge Tools.

**LEWISTON.**

Bean & Stetson,.....Plumbers.  
Bickford & Eastman,.....Plumbers.  
Chandler, L. S.,.....Machinist.  
Field, F. F.,.....Machinist.  
Fountain, Wm.,.....Plumber.  
King, C. H.,.....Machinist.  
Lewiston Fire Works,.....Mfrs. Files.  
Lewiston Machine Co.,.....Machinists.  
Morrell & Young,.....Mfrs. Files.  
Smith & Smith,.....Gas Fitters.

**LIBERTY.**

Gilman, R. H. & Son,.....Iron Founders.  
Glidden, R. H.,.....Mfr. Agl. Impts.  
Hurd, Wm.,.....Mfr. Edge Tools.

**LINCOLN.**

Ayer, W. R.,.....Mfr. Agl. Impts.  
Weatherbee, A. W.,.....Mfr. Agl. Impts.

**LINCOLN CENTRE.**

Gates, H.,.....Mfr. Agl. Impts.

**LISBON FALLS.**

Coombs, J. H.,.....Mfr. Agl. Impts.

**LITCHFIELD.**

Miller, Z.,.....Mfr. Edge Tools.  
Plimpton, E. & Sons,.....Mfrs. Agl. Impts.

**LIVERMORE FALLS.**

Paine, B.,.....Mfr. Plows.

**LOCKE'S MILLS.**

Pollard, Kendall,.....Machinist.

**LOWELL.**

Fox, W.,.....Mfr. Edge Tools.

**LYMAN.**

Huff, Orison,.....Machinist.

**MACHIAS.**

Foster, Lewis,.....Mfr. Edge Tools.

Sargent, Stone & Co.,.....Machinists.

**MADISON.**

Currier, W. H.,.....Machinist.

**MATTAWAMKEAG.**

Bailey, A. O.,.....Machinist.

Graham, S. R.,.....Machinist.

Mincher, W. T.,.....Machinist.

Moore, S. W.,.....Machinist.

**MECHANICS FALLS.**

Edgecomb, E. F.,.....Mfr. Tools.

Penny, J. W.,.....Machinist.

**MILLTOWN.**

Corson, G. H.,.....St. Croix & Penobscot R. R.

**MILO.**

Bishop, J. L.,.....Mfr. Agl. Impts.

Freeman, O. W.,.....Mfr. Agl. Impts.

Snow, C. A.,.....Mfr. Agl. Impts.

**MONMOUTH.**

Emory, Waterhouse & Co.,.....Mfrs. Agl. Impts.

**MONROE.**

Curtis, A. J.,.....Machinist.

**MORRILL.**

Mears, J. R.,.....Mfr. Agl. Impts.

**MOUNT VERNON.**

Fairbanks, John,.....Mfr. Agl. Impts.

Fairbanks, S.,.....Mfr. Agl. Impts.

Mayhew, M. S.,.....Iron & Steel.

**NEWFIELD.**

Emery, Geo. S.,.....Iron Founder.

Kelley, Manley,.....Mfr. Agl. Impts.

Pillsbury, John D.,.....Machinist.

**NEWPORT.**

Eldridge, O. T.,.....Machinist.

**NOBLEBORO.**

Mulligan, J.,.....Mfr. Agl. Impts.

**NORTH BERWICK.**

Hussey, Timothy B.,.....Mfr. Plows.

**NORTH LIVINGSTON.**

Hubbard, John,.....Machinist.

Hubbard, Silas,.....Machinist.

**NORTH NEW PORTLAND.**

Bartlett, Chas. H.,.....Machinist.

**NORWAY.**

Crooker, J. O.,.....Mfr. Agl. Impts.

Cummings, Chas. B.,.....Iron Founder.

Mason Bros.,.....Mfrs. Agl. Impts.

Woodsen, Elias,.....Machinist.

**OLDTOWN.**

Chapman, Thos. M.,.....Machinist.

**ORLAND.**

Mason Bros.,.....Machinists.

**ORONO.**

Brown, Edward,.....Machinist.

Mansfield, Ed.,.....Mfr. Edge Tools.

**OXFORD.**

Abbott, J. M.,.....Machinist.

Morse, D. F.,.....Machinist.

**PARKMAN.**

Curtis, G. T.,.....Brass Founder.

**PEMBROKE.**

Pembroke Iron Works,.....Rolling Mill.

**PHILLIPS.**

Davis, C. M.,.....Mfr. Agl. Impts.

Fuller, W. F.,.....Mfr. Agl. Impts.

Jones, J. B. P.,.....Sandy River R. R.

**PITTSSTON.**

Rowe, O. V.,.....Mfr. Edge Tools.

**PORTLAND.**

**MACHINISTS.**

Babcock, Chas. P.

Chase & Son.

Jones, W. O. & Co.

Lang, E. M. & Co.

Lidback, John A.

Plummer, C. M. & H. T.

Portland Co.

Winslow, Daniel & Son.

**PLUMBERS, STEAM AND GAS FITTERS.**

Bond, J. H. & Co.

Brown, Chas.

Brown, Levi.

Clark, W. C.

Cleveland & Marston.

Kinsman, John.

Laugan, Frank & Co.

McDonald, Kenneth.

Merrill, Isaac D.

Merrill, S. D. & Co.

Miller, James.

Pearce, W. A.

Pennell, W. H. & Co.

Smith & Abbott.

**MISCELLANEOUS.**

Bradford, Joseph,.....Mfr. Tools.

Cameron Estes Plow Co.

Centre Draft Mowing Machine Co.

Corey, Eben & Co.,.....Iron & Steel.

Crockett, Leonard,.....Brass Founder.

Davis, Chas. K.,.....Iron & Steel.

Donnell, C. A.,.....Brass Founder.

Dunham, Rufus & Son,.....Mfrs. Britannia Ware.

Frye, John J.,.....Mfr. Plows.

Gerrish, J. J. & Co.,.....R. R. Supplies.

Kelley, Daniel T.,.....Iron Founder.

Kendall & Whitney,.....Mfrs. Agl. Impts.

Libby & Bolton,.....Mfrs. Edge Tools.

Ligonia Iron Co.,.....R. R. Supplies.

Poor, Geo. H.,.....Portland & Ogdensburg R. R.

Portland Rolling Mills.

Portland Stove Foundry Co.

Presumpscot Iron Co.,.....Mfrs. Car Axles, etc.

Quinn & Co.,.....Boiler Makers.

Scott, W. H.,.....Iron Worker.

Stevens, A. E. & C.,.....Iron & Steel.

Stinchcomb, Jno.,.....Iron Founder.

Thornhill, Robert,.....Mfr. Files.

**RICHMOND.**

Ames, J. F. & D. C.,.....Mfrs. Edge Tools.

Hatborne, J. K.,.....Brass Founder.

Mansir, Job,.....Machinist.

**ROCKLAND.**

Cobb, Frank E.,.....Plumber.

Cric, H. H. & Co.,.....Iron & Steel.

Malett, John L.,.....Mfr. Edge Tools.

Richardson, J. R.,.....Iron & Steel.

Rockland Brass & Iron Foundry.

Torrey, Jos. G. & Son,.....Brass Founders.

Wight, James,.....Gas Fitter.

**SACO.**

Deering, J. R.,.....Mfr. Edge Tools.

Gilman, A. H.,.....Machinist.

Kelly & Libby,.....Machinists.

Ridgion, G. T.,.....Machinist.

**SANFORD.**

Allen, W. A.,.....Machinist.

Garnsey, Amos,.....Machinist.

Newell, Samuel,.....Mfr. Agl. Impt.

**SANGERVILLE.**

Barrows, C. E.,.....Mfr. Edge Tools.

**SEARSPORT.**

Barney, W. O. & Chas.,.....Iron Founders.

**SHERMAN.**

Daggett, C.,.....Mfr. Edge Tools.



**SKOWHEGAN.**

Bacon, W. F. .... Iron Founder.  
 Foster, H. M. .... Mfr. Edge Tools.  
 Nolin, G. M. .... Mfr. Scythes.  
 Whorff, Barnett & Co. .... Mfrs. Edge Tools.  
 Williams, Chas. A. & Co. .... Mfrs. Hammers, etc.

**SOUTH BERWICK.**

Earl, John H. .... Machinist.  
 Varney, Jno. B. .... Mfr. Plows.

**SOUTH HOPE.**

Cole, H. M. .... Mfr. Agl. Impls.

**SOUTH PARIS.**

Jonas, A. C. .... Machinist.  
 Merrill, F. C. .... Mfr. Plows.  
 Royal, W. B. & Co. .... Mfrs. Agl. Impls.

**SOUTHPORT.**

Matthews, John. .... Machinist.

**SOUTH WESTON.**

Barker, D. J. .... Mfr. Edge Tools.

**SPRINGFIELD.**

Graves, N. .... Mfr. Edge Tools.  
 Stinson, F. A. .... Mfr. Edge Tools.

**STRONG.**

Dyer, W. H. .... Machinist.

**SULLIVAN.**

Collamore, L. T. .... Iron Worker.  
 Emery, Cyrus & Co. .... Mfrs. Edge Tools.

**THOMASTON.**

Crawford, S. J. .... Iron Founder.  
 Henderson, J. & Co. .... Plumbers.

**THORNDIKE.**

Hussey, Thomas B. .... Iron Founder.

**TRESCOTT.**

Nutter, Chas. .... Machinist.

**TROY.**

Monroe, M. W. .... Mfr. Edge Tools.

**TURNER.**

Dillingham, C. K. .... Machinist.

**UNION.**

Jones, Geo. H. .... Machinist.  
 Jones, Stephen W. .... Iron Founder.

**UNITY.**

Cates, N. A. .... Mfr. Agl. Impls.

**VAN BUREN.**

Butler, S. N. .... Machinist.

**WALDOBOROUGH.**

Boyd, James P. .... Iron Founder.

**WARREN.**

Mallett, James. .... Mfr. Edge Tools.

**WATERVILLE.**

Boothby, W. .... Mfr. Edge Tools.  
 Collett, Job & Co. .... Mfrs. Files.  
 Goodell & Co. .... Iron Founders.  
 Philbrick, J. W. .... Maine Central R. R.  
 Webber, Haviland & Philbrick. Iron Founders & Machinists.

**WAYNE.**

Fillebrown, L. W. .... Machinist.  
 Lovejoy, Tillottson. .... Machinist.  
 North Wayne Tool Co. .... Mfrs. Scythes, etc.

**WELD.**

Carpenter, G. B. .... Machinist.

**WELLINGTON.**

Buzzell, T. H. .... Mfr. Edge Tools.  
 Hutchins, Isaac. .... Machinist.

**WESTBROOK.**

Foster & Brown. .... Machinists.  
 Knowlton Bros. .... Machinists.  
 Westbrook Foundry Co.

**WEST BUXTON.**

Harmon, C. P. .... Machinist.  
 Libby, Arthur. .... Machinist.

**WEST FALMOUTH.**

Winn, Ira. .... Machinist.

**WEST GARLAND.**

Gowdon, H. H. & Son. .... Machinists.

**WEST'S MILLS.**

Oliver, Eli. .... Machinist.  
 Oliver, Hiram. .... Machinist.

**WEST WATERVILLE.**

Benjamin & Allen. .... Iron Founders.  
 Dunn Edge Tool Co. .... Mfrs. Scythes, etc.  
 Emerson, Stevens & Co. .... Mfrs. Scythes, etc.  
 Hubbard & Blake Mfg. Co. .... Mfrs. Scythes, etc.  
 Lyon, Bragg & Hubbard. Founders & Machinists.

**WILTON.**

Holt, Hiram & Co. .... Mfrs. Scythes, etc.

**WINTHROP.**

Whitman, W. E. .... Mfrs. Agl. Impls.

**WISCASSET.**

Neal, Ed. B. .... Iron & Steel.

**YARMOUTH.**

Nemo, Thos. .... Machinist.  
 Weston, Chas. H. .... Machinist.

**MARYLAND.****ANNAPOLIS.**

Smull, E. H. .... Plumber.

**ANTIETAM.**

Ahl, P. A. & Bro. .... Iron Works.

**BALTIMORE.****BOILER MAKERS.**

Bentley, C. W. .... 25 So. Front.  
 Clark, Jas. & Co. .... South side Basin.  
 Codd, E. J. & Co. .... 239 So. Caroline.  
 Coleman, John T., S. E. cor. Holliday and Pleasant.  
 Frazier, E. H. .... 132 Thames.  
 Frolich, John C. & Co. .... 6 to 10 Thames.  
 Larrabee, H. C. & Co. .... Caroline and Lancaster.  
 Malster & Reany. .... Locust Point.  
 Murray, Jas. & Son. .... 40 York.  
 Nicodemus, F. C. & Co. .... 134 Thames.  
 Pettit, W. L. .... 40 York.  
 Poole & Hunt. .... 7 German.  
 Reeder, Chas. & Sons. .... 51 Hughes.  
 Snowden & Cowman. .... 86 W. Fayette.  
 Union Iron Works. .... Woodberry.  
 Walz, J. & Co. .... 119 Greenmount Av.  
 Weiskittel, A. & Son. .... 302 Aliceanna.  
 White, Thomas. .... 106 So. Fremont.

**BRASS FOUNDERS.**

Gisriel, Wm. .... 74 North.  
 Harris & Shearer. .... 45 So. Liberty.  
 Ives, John A. & Bro. .... 11 N. Frederick.  
 Keener, John H. .... 46 Thames.  
 Keys, W. W. .... Aliceanna & Spring.  
 Kirk, Robert C. .... 9 So. Holliday.  
 Kirk, W. W. .... 96 W. Pratt.  
 McShane, H. & Co. .... 161 North.  
 Regester, J. & Sons. .... Holliday and Saratoga.

**IRON FOUNDERS.**

Abbott Iron Co. .... Burke and Hudson.  
 Anderson Bros. & Co. .... Second and 8th Av.  
 Baltimore Car Wheel and Foundry Co., Concord and Essex.  
 Baltimore Iron Co. .... Boston and Patuxent.  
 Bartlett, Hayward & Co. .... Pratt and Scott.  
 Bates, Jas. Sr. .... S. W. cor. Pratt and President.  
 Benson, B. S. .... 52 E. Monument.  
 Bentley, C. W. .... 25 S. Front.  
 Campbell, J. Vernon. .... Aliceanna and Eden.  
 Coates & Bro. .... Locust Point.

**BALTIMORE.—Continued.**

Delaplaine, Jas. L.,	2 York.
Dinsmore & Kastendike,	44 So. Howard.
Heath, C. C. & Co.,	54 Hamburg.
Jones, Thos. J.,	36 Lee.
Kern, John Jr. & Co.,	286 W. Baltimore.
Lacy, J. J. & Co.,	Philpot and Willis.
Larrabee, H. C. & Co.,	Caroline and Lancaster.
Leibrandt & McDowell Stove Co.,	143 W. Pratt.
Murray Jas. & Son,	40 York.
Nixon, Nicholas,	57 N. Frederick.
Patapasco Iron Works,	8 S. Jay.
Plitt, Geo.,	Central and Eastern Av.
Reese, D. M. & Sons,	Locust Point.
Sexton, S. B. & Sons,	154 Conway.
Shannon, Wright & Co.,	34 Lee.
Sheppard, Isaac A. & Co.,	S. W. cor. Eastern Av. and Chester.
Smyser, E. G.,	4 Light.
Washington, Matthew J.,	91 Pierce.
Watson, M. H. & Bro.,	65 East-ern Av.
Weeks, Samuel F.,	74 Richmond.
Wehrheim, Geo.,	249 Frederick Av.
Wilson, John A.,	17 Park Av.
Wilson, Robert,	274 Saratoga.
Wright, J. E. & Son,	151 W. Lombard.
Yingling, Chas. H.,	20 N. Poppleton.
Young, Geo. W.,	75 Granby.

**IRON AND STEEL.**

Addison, Clarke & Bro.,	108 W. Lombard.
Cornelius, Thos.,	49 N. Para.
Broderick, John T.,	67 Greenmount Av.
Buck, E. D.,	55 Light.
Hoffman, R. C. & Co.,	21 So. Frederick.
Horne, Michael T. & Co.,	Stirling and Chew.
Huggins, Thomas J.,	13 Mercer.
Irwin & Co.,	55 S. Howard.
Keen & Hagerty,	30 So. Calvert.
Keyser Bros. & Co.,	23 German.
Lyon, Conklin & Co.,	27 Light.
Norris & Bro.,	57 2d.
Parker, E. L. & Co.,	83 So. Charles.
Pope & Cole,	57 So. Gay.
Pratt, E. & Bro.,	20 So. Charles.
Robertson, Jas. & Co.,	210 S. Howard.
Schultz, A. & Co.,	1 E. Pratt.
Stickney Iron Co.,	11 So. Gay.
Troxell, Handy & Greer,	237 W. Pratt.
Tyler, L.,	156 Light St. Wharf.
Wetherall, W. G.,	57 So. Calvert.
Whitney & Co.,	129 Camden.
Winternitz, Chas. & Son,	279 W. Pratt.
Winternitz, Samuel G. & Bro.,	103 Camden.
Wyeth, W. N.,	46 So. Charles.

**MACHINISTS.**

Adt, John B.,	88 N. Holliday.
Basshore, Thos. C. & Co.,	28 Light.
Bateman & Hooper,	8 2d.
Ben-on, Benj. S.,	52 E. Monument.
Bentley, C. W.,	25 So. Front.
Binder, John F.,	103 Paca.
Blackburn & Allen,	118 W. Pratt.
Brecht, Lewis,	105 Franklin.
Brown, F. S. and G. L.,	145 North.
Buxton, John H. & Co.,	19 E. Pratt.
Clark, F. & Co.,	45 So. Charles.
Clark, Jas. & Co.,	South Side Basin.
Clarkson J. & Sons,	75 N. Front.
Codd, E. J. & Co.,	259 S. Caroline.
Detrick, J. S.,	Balderston and Grant.
Flynn & Emrich,	Saratoga and Holliday.
Frank, Ernest & Son,	426 W. Pratt.
Frazier, E. H.,	132 Thames.
Froehlich, John C. & Co.,	4 to 10 Thames.
Gornall, Richard,	11 N. Frederick.
Grant, M.,	19 Mercer.
Griffith & Margerette,	6 W. Falls Av.
Harlem Mfg Co.,	35 St. Paul.
Harvey & Leaf,	3 2d.
Ives, John A. & Bro.,	11 N. Frederick.
Jackson & Tiler,	18 So. Howard.
Kemp, C. M.,	74 S. Charles.
Larrabee, H. C. & Co.,	Caroline and Lancaster.
Lay Gas Machine Co.,	25 Light.
McCahan, Geo. L.,	28 Light.
McMillan, Jas.,	161 North.

**BALTIMORE.—Continued.**

Malster & Reany,	Locust Point.
Matthews, Jos. B.,	41 Centre Market Sq.
Munder, Gustav,	53 German.
Murrill & Keizer,	28 N. Holliday.
Nicodemus, F. C. & Co.,	134 Thames.
Norwood, Ewd.,	127 N. Stricker.
Page, Geo. & Co.,	5 N. Schroeder.
Pettit, W. L.,	40 York.
Poole & Hunt,	7 German.
Ramsey, H. A. & Co.,	Hughes and William.
Reeder, Chas. & Sons,	51 Hughes.
Schiller, Chas.,	11 Swan.
Severson, Thos. H.,	548 N. Gay.
Snowden & Cowman,	86 W. Fayette.
Stevenson & Plunkett,	45 N. Holliday.
Taylor, Sam'l G.,	East Av. Falls and Granby.
Treulich, Geo. P.,	Jenkins Lane.
Wells, Richard & Co.,	foot of Bond.
Wiesner, Eberhardt,	35 Park Av.
Williams, John H. & Co.,	Baltimore and Howard.

**PLUMBERS, STEAM AND GAS FITTERS.**

Allenbaugh, Charles T.,	55 Etting.
Askey, Jas. R.,	28 N. Howard.
Barry, P. T.,	153 Dolphin.
Barry Bros.,	21 W. Chase.
Becker, Henry P.,	64 S. Paca.
Bennett, L. H.,	114 George.
Holand, Thos. B.,	31 Park Av.
Rowman, H. C.,	119 N. Howard.
Brazier, G. W.,	325 Saratoga.
Brenton & Bro.,	100 St. Paul.
Brodie, Wm. R.,	125 N. Carey.
Bumgarner, G. W.,	170 E. Baltimore.
Burke, E. A.,	Fayette and Calvert.
Caldwell, Jas.,	Washington nr John.
Carey, Patrick,	23 N. Eutaw.
Carmine, C. G.,	58 N. Howard.
Carruthers, Chas. J.,	113 N. Howard.
Carruthers, Richard,	885 W. Baltimore.
Chase, R. M.,	Fayette and Pine.
Claby, Louis F.,	18 E. Fayette.
Connolly, James,	62 Park Av.
Coulter, John A.,	foot of Warren.
Cromwell, Alex.,	84 George.
Davidson G. M.,	710 W. Baltimore.
Davidson, R. J.,	778 W. Baltimore.
Davidson, C. Y. & Co.,	5 N. Liberty.
Deal, W. C.,	92 Park Av.
Diedrich, Martin,	79 E. Lombard.
Dougherty, M. J.,	133 Aisquith.
Drebling, W. A.,	21 W. Fayette.
Dunnett, W.,	171 N. Eutaw.
Eggleston, E. C.,	136 N. Gay.
Eldman, August,	58 S. Eutaw.
Elsmad, J. T.,	632 W. Baltimore.
Fitch, Jas.,	91½ N. Caroline.
Fitch Jos. A.,	17 Jefferson.
Foster, D. B. & Son,	39 Clay.
Gardner, Chas. & Bro.,	235 E Pratt.
Glenn, John W.,	65 E. Madison.
Graton, Thos. L.,	27 Post Office Av.
Graton, Jas.,	Edmondson Av. and Fremont.
Griffin, Thos. J.,	216 Madison Av.
Grimes, Chas. E.,	294 Lexington.
Groscup, Wm.,	47 Brown.
Gulrick, Conrad,	37 Thames.
Habbersett, John,	191 E. Monument.
Halloran, M. Jr.,	Myrtle Av. and Mosher.
Hamilton, S. M. & Co.,	223 Linden Av.
Hamnen, John T. & Bro.,	57 So. Bond.
Hardesty, Geo. W.,	21 W. Fayette.
Haupt, John M.,	131 N. Schroeder.
Healy & Bro.,	Calvert and Centre.
Hemple, H. W.,	485 N. Gay.
Hibbitts, Patrick,	815 W. Baltimore.
Hoepner, Casper & Sons,	37 Lee.
Hoffman, Charles C.,	7 N. Pine.
Holtz, Henry C.,	198 Madison Av.
Hooper, W. V.,	Lafayette Av. and Stricker.
Hughes, Vincent,	164 E. Pratt.
Hunter, Andrew,	Eutaw and Druid Hill Av.
Hutchinson Bros.,	14 Light.
Inderrieden, Chas. H.,	18 Patterson Av.
Jevens, John W.,	886 W. Baltimore.
Johnson, W. O.,	18 W. Fayette.
Kerr, Henry,	48 E. Baltimore.

**BALTIMORE.—Continued.**

Kirk, W. W.,	96 W. Pratt.
Kirschner, Louis,	148 German.
Knight & Brayden,	142½ W. Fayette.
Knipp, Geo. & Bro.,	42 N. Howard.
Kries, Peter,	163 W. Fayette.
Lauderman, John M.,	14 Boston.
Likes, Jacob,	87 W. Fayette.
Lucas, Jas. B.,	80 W. Centre.
Lyons, Andrew J.,	322 N. Eutaw.
McAfee, W. L.,	78 W. Biddle.
McAllister, Wm.,	193 Penna. Av.
McCahan, D. L.,	2 N. Central Av.
McCall, P. A.,	31 S. Eutaw.
McCart, J. H.,	106 Thames.
McConnell, J. F.,	228 N. Howard.
McCrea, F. A.,	Edmondson Av. and Stockton.
McCrea, Jas.,	Carrollton Av. and Raborg.
McLaughlin, P. M.,	164 N. Exeter.
Mallalien, W. H. H.,	Clark and Brune.
Mallon, Thos.,	67 ½ N. Front.
Manns, Chas.,	Paca and Mulberry.
Manns, W. J.,	65 N. Greene.
Merz, Henry,	250 W. Pratt.
Mess, John F.,	280 So. Sharp.
Millar, Jas. Jr. & Co.,	85 Richmond.
Minnich, Geo. R.,	127 Saratoga.
Miskelly, J. V.,	Pleasant and Davis.
Mitchell, Jos. C.,	S. W. cor. Lombard and Hanover.
Murphy, J. J.,	100 Frederick Av.
Murray, W. H.,	449 N. Calhoun.
Neely, Jos.,	311 N. Bond.
Nolan, M. J.,	1 Richmond.
Oeler, E. P.,	135 North.
Ratican, Thos.,	153 Greenmount Av.
Reilly, Jas. & Son,	152 N. Calvert.
Roche, John,	204 Light.
Rock, J. P.,	59 N. Holliday.
Rodgers, Geo. H.,	66 N. Charles.
Romoser, Chas. E.,	168 S. Sharp.
Rothrock, W. H.,	37 Light.
Rowles, W. W. Jr.,	218 Druid Hill Av.
Ruckle, W.,	414 Lexington.
Share, Albert,	288 E. Pratt.
Shorey, N. B.,	West Falls Av. nr. Pratt.
Shultz, Chas. H.,	245 W. Biddle.
Sieck, J. Henry,	Howard and Barre.
Sinclair, Perry,	279 Bank.
Sindall, S. M. & Co.,	6 W. Pratt.
Smiley, Jos.,	588 W. Baltimore.
Sparks, Harry C.,	178 E. Eager.
Stern, A.,	3 N. High.
Stidham, J. D.,	74 N. Eutaw.
Stitcher, P. H. C. Jr.,	160 Penna. Av.
Sullivan, D. N.,	46 Park Av.
Sutkoski, M.,	90 Park Av.
Swann, Thos. A.,	98 W. Pratt.
Thompson, Wm. A.,	195 Mulberry.
Thornton, Jas. A.,	466 Penn. Av.
Trainor, John,	85 Harlem Av.
Tyler, Wm. R.,	14 E. Pratt.
Wagner, August W.,	46 S. Sharp.
Walther, Geo. W.,	96 Penn. Av.
Ward, John,	1 Read.
Ward, Thos.,	23 ½ Wilson.
Warner, J. P.,	54 W. Fayette.
Washington, M.,	37 N. High.

**MISCELLANEOUS.**

Baker, E. J.,	Mfr. Models,
110 W. Pratt.	
Baltimore Plow Co.,	Mfrs. Plows,
104 So. Charles.	
Codd, W. C.,	Machinists' Supplies,
306 Aliceanna.	
Dailey & Bro.,	Sheet Iron Workers,
788 W. Baltimore.	
DeValin, John H.,	Mfr. Iron Railings,
87 Harrison.	
Dugan, Cumberland & Co.,	R. R. and Machinists'
Supplies, 28 S. Charles.	
Ellerbrook, H. U.,	Coppersmith,
23 North Frederick.	
Geddes, Jas. W.,	Galvanized Iron Works,
67 North.	
Gilmore, Wm.,	Rivet and Spike Works,
8 E. cor. President and Fawn.	

**BALTIMORE.—Continued.**

Heiss, Jacob F.,	Mfr. Files,
154 East.	
Howard, Jos. C.,	Sheet Iron Worker,
104 Franklin.	
Hubert, John,	Coppersmith.
271 S. Ann.	
Hudgins, John R. & Co.,	Mfrs. Edge Tools,
Pratt & Mill.	
Jervis, Jas.,	Mfr. Files,
70 Battery Av.	
Johnston, David,	Coppersmith,
64 N. Holliday.	
Kanne, W. H.,	Mfr. Edge Tools,
59 Boston.	
Kavanaugh, J. M.,	Coppersmith,
16 W. Lombard.	
Kesting, Philip,	Mfr. Files,
87 N. Front.	
Lee, L. H. & Bro.,	Mfrs. Agl. Impts.
N. E. cor. Sharp and Lombard.	
Lenderking, P. H.,	Coppersmith,
233 W. Pratt.	
McCoy, Jas.,	Machinists' Supplies,
72 W. Pratt.	
McGarity, Bernard,	Mfr. Saws,
69 N. Front.	
Maguire, W.,	Mfr. Scales,
427 N. Mount.	
Mahler, Christian,	Coppersmith,
103 McElderry.	
Marden, Jesse,	Mfr. Scales.
Charles and Balderston.	
Miller, Luke H.,	Mfr. Safes,
252 W. Baltimore.	
Morton, Reed & Co.,	R. R. and Machinists' Sup-
plies, 50 German.	
Pagels, Geo. H.,	Mfr. Iron Railings,
Saratoga and Jasper.	
Reuter & Mallory,	Machinists' Supplies,
22 Light.	
Schaal, Geo. A.,	Mfr. Files,
12d.	
Schaal, John Henry,	Mfr. Files,
30 Centre Market Sq.	
Serber, A. T.,	Sheet Iron Worker,
153 Ensor.	
Spedden, R. M. & Co.,	Machinists' Supplies,
261 S. Broadway.	
Thieme, Chas.,	Mfr. Files,
119 N. Front.	
Toland, Jas. & Son,	Mfr. Saws,
85 N. Front.	
Union File Works,	Mfr. Files,
311 North.	
Wallace & Bro.,	Machinists' Supplies
116 W. Pratt.	
Wells, John Sons,	Machinists' Supplies,
53 Thames.	
Whiting, J. A. & Co.,	Galvanized Iron Works,
Howard and Lee.	

**BEL AIR.**

Holland, James,	Sheet Iron Worker.
-----------------	--------------------

**CENTREVILLE.**

Hopkins, R. M.,	Iron Founder.
Vain, R. F.,	Iron Founder.

**CHARLOTTE.**

Fagan, Edward,	Mfr. Agl. Impts.
----------------	------------------

**CHASE'S.**

Ross, Alfred,	Machinist.
---------------	------------

**CHESTERTOWN.**

Hyland, W. A. & Co.,	Iron Founders.
----------------------	----------------

**CRISFIELD.**

Green & Gandy,	Shipsmiths.
----------------	-------------

**CUMBERLAND.**

Beall Foundry & Machine Works.	
Laing, James,	Plumber.
McKaig, Merwin,	Iron Founder.
Paul, Thos. H. & Son,	Iron Founders.
Seay, C. A. & Son,	Plumbers & Gas Fitters.
Shermesser, L.,	Iron Founder.

**EASTON.**

Biery, W. J.,.....Iron Founder.  
Tuthill, N.,.....Iron Founder.

**ELKTON.**

McCullough Iron Co., Mfrs. Galv'ized & Sheet Iron  
Whitworth, Geo.,.....Iron Founder.

**ELLICOTTS CITY.**

Kirkwood, Robert G.,.....Machinist.  
Laekford, J.,.....Sheet Iron Worker.  
O'Donnell & Myers,.....Iron Founders.

**EMMITTSBURG.**

Fraley, W. & Bro.,.....Iron Founders.

**FEDERALSBURG.**

Moore, J. A.,.....Iron Founder.

**FORESTVILLE.**

Randall, Geo. H.,.....Machinist.

**FREDERICK.**

Abbott, J. H.,.....Machinist.  
Blumenoner, N. J. & Co.,.....Plumbers.  
Ebert, E. C.,.....Plumber.  
Page, Calvin,.....Iron Founder.  
Pampell, Heury,.....Iron Founder.

**FROSTBURG.**

Gerlach, Andrew,.....Gas Fitter.  
Paul, R. C.,.....Iron Founder.  
Paul, Thos. H. & Son,.....Founders & Machinists.  
Williamson, Geo. & Co.,.....Iron Founders.

**GALENA.**

Hyland, W. A. & Co.,.....Machinists.

**GLENWOOD.**

Dorsey, E. & Son,.....Machinists.

**GREENSBORO.**

Simpers, H. B.,.....Mfr. Plows.

**HAGERSTOWN.**

Hagerstown Steam Engine & Machine Co.  
Schlotterbeck, W.,.....Plumber & Gas Fitter.  
St. John & Co.,.....Plumbers.

**HEREFORD.**

Carman, A. S.,.....Sheet Iron Worker.

**LAUREL.**

Diven, W. H. & Son,.....Iron Founders.  
Ford & Fairall,.....Founders & Machinists.  
Whitworth, R. H.,.....Machinist.

**LEITERSBURG.**

Garver, Foltz & Co.,.....Founders & Machinists.

**LINWOOD.**

Haines, J. L.,.....Plumber & Gas Fitter.

**MANCHESTER.**

Shower, W. H.,.....Founder & Machinist.

**MIDDLETOWN.**

Linthicum, J. & R. E.,.....Iron, etc.

**NEWMARKET.**

Russell, Isaac S.,.....Machinist.

**NEW WINDSOR.**

Engle, Smith & Co.,.....Mfrs. Agl. Impts.

**NORRISVILLE.**

Stifler, C. H.,.....Iron Founder.

**NORTH EAST.**

McCullough Iron Co.,.....Mfrs. Galvanized Iron.

**PERRYVILLE.**

Armstrong & Co.,.....Iron Founders.

**POCOMOKE CITY.**

Dryden, Henry & Son,.....Sheet Iron.

**PORT DEPOSIT.**

Bibb, B. C. & Son,.....Iron Founders.  
Touchstone, J. M.,.....Mfr. Ornamental Iron Work.

**POTOMAC.**

Lynch, W. T.,.....Machinist.

**RISING SUN.**

Bird, Jos. C.,.....Machinist.  
Davis, C. J.,.....Iron Founder.

**SALISBURY.**

Thoroughgood, W. M.,.....Iron Founder.

**SUNSHINE.**

Bazzell, J. Q.,.....Iron Founder.

**TANEYTOWN.**

Haugh, W. T.,.....Machinist.

**UNION BRIDGE.**

Russel, T. W.,.....Machinist.

**WESTERPORT.**

Cranmer, Joseph,.....Iron Founder.  
White, Gleason & Co.,.....Iron Founders.

**WESTMINSTER.**

Callaghan, W. S.,.....Gas Fitter.  
Taylor (The) Mfg. Co.,.....Mfrs. Steam Engines.

**WILLIAMSPORT.**

Karnes, D. H.,.....Machinist.

**WOODBERRY.**

Poole & Hunt,.....Iron Founders & Machinists.

**WOODSBORO.**

Cramer, C. A. & T. F.,.....Machinists.

**MASSACHUSETTS.****ABINGTON.**

Abington Tack & Machine Assn.  
Dunham Riveting Machine Assn.  
Ellis, Horatio,.....Machinist.

**ADAMS.**

Ainslee, James D.,.....Plumber.  
Allen, D. D.,.....Machinist.  
Allen, Jas A.,.....Founder & Machinist.  
Champeney, J. C.,.....Founder & Machinist.  
Todd, E.,.....Plumber.

**ALSTON.**

Adams, F. D.,.....Boston & Albany R. R.

**AMESBURY.**

Currier, F. J.,.....Gas Fitter.  
Dey, W. H.,.....Mfr. Files.  
De Rochmont, A.,.....Iron Founder.  
Guptill, Moses P.,.....Machinist.  
Osgood, E. W.,.....Machinist.  
Pettingill, Chas. F. & Co.,.....Machinists

**AMHERST.**

Dickinson, E. P.,.....Machinist.  
Dickinson & Lee,.....Gas Fitters.  
Hunt, W. W.,.....Plumber.  
Kellogg, Wm.,.....Mfr. Hardware.

**ANDOVER.**

Loring, J. R.,.....Machinist.  
Saunders Bros.,.....Plumbers.

**ARLINGTON.**

Hobbs, J. C. & Co.,.....Mfrs. Cutlery.  
Welch & Griffiths,.....Mfrs. Saws.  
Wood, A. T. & Co.,.....Mfrs. Ice Tools.

**ASHBURNHAM.**

Packard, Chas. F.,.....Millwright.

**ASHFIELD.**

Gardner, Nelson,.....Mfr. Cutlery.

## ASHLAND.

Anthony, J. M.,.....Machinist.  
Wise, Thomas,.....Machinist.

## ATHOL.

Athol Machine Co.,.....Machinists.  
Cheney, C. W.,.....Machinist.  
Colvin, J. A. & Son,.....Iron Founders.  
Fletcher, A. F.,.....Copper Pump Mfr.  
Gerry, Geo. & Son,.....Machinists.  
King, W. H.,.....Mfr. Hardware.  
Miller & Ainsworth,.....Steam & Gas Fitters.  
Rawson, H. C.,.....Iron Founder.  
Richardson, C. F.,.....Machinist.  
Richardson, Lyander,.....Machinist.  
Standard Tool Co.,.....Mfrs. Tools.  
Starrett, L. S.,.....Machinist.

## ATHOL CENTRE.

Frost & Bemis,.....Plumbers.

## ATTLEBOROUGH.

Attleborough Machine Co.,.....Machinists.  
Attleborough Stove Works.  
Barnett, W.,.....Machinist.  
Bishop & Givitt Stove Co.,.....Stove Founders.  
Baggitt, H. N.,.....Stove Founder.  
Engley, James H.,.....Gas Fitter.  
Richardson, Orville P.,.....Mfr. Shuttle Irons.

## AUBURNDALE.

McAllister, D. F.,.....Plumber.

## AYER.

Ames Plow Co.,.....Iron Founders.  
Briggs & Kelley,.....Iron Founders.  
Hovey, Horace C.,.....Machinist.  
Standard Spindle Co.,.....Machinists.  
Stevens, C. C. & J. F.,.....Machinists.

## BALDWINVILLE.

Goodnow, J. B.,.....Millwright.  
Willis, A. S.,.....Millwright.

## BARRE.

Allen, C. G.,.....Mfr. Agl. Implt.  
Blackley, E. D.,.....Machinist.  
Heald, S. & Sons,.....Iron Founders.

## BELCHERTON.

Shumway, Geo. N.,.....Mfr. Agl. Impls.  
White, Jefferson,.....Mfr. Edge Tools.

## BELLINGHAM.

Wilcox, J. O. & Son,.....Mfrs. Agl. Impls.

## BELMONT.

Reed, S. L.,.....Mfr. Edge Tools.  
Rogers, F. P.,.....Plumber.

## BERNARDSTON.

Dewey, J. N.,.....Mfr. Agl. Impls.  
Hulbert, E. S.,.....Mfr. Agl. Impls.  
Nichols Bros.,.....Mfrs. Cutlery.

## BEVERLY.

Ingersoll, Daniel S.,.....Plumber & Gas Fitter.  
Robertson, R. & J.,.....Plumbers.  
Trask, Israel,.....Plumber.  
Whitman, J. N.,.....Machinist.  
Woodbury, N. W.,.....Machinist.

## BILLERICA.

Hill & Proctor,.....Machinists.

## BOSTON.

## BOILER MAKERS.

Atlantic Works,.....72 Border St. E. B.  
Babcox, Wilcox & Co.,.....50 Oliver.  
Chubbuck, S. E. & Son,.....971 Tremont.  
Cook, Rymes & Co., Water cor. Chamber, Charlestown.  
Cunningham, J. H. & T.,.....29 Water, Charlestown.  
Exeter Machine Works,.....50 Federal.  
Hanford, M.,.....27 Tremont Row.  
Hinkley Locomotive Co.,.....439 Albany.  
Hodge, E. & Co.,.....160 Liverpool, E. B.  
Killilea, Michael,.....Tuft's Wharf, E. K.

## BOSTON—Continued.

Lally & Russell,.....West 1st cor. C.  
Loring, Harrison,.....East 1st nr. M.  
McLauthlin, Geo. T. & Co.,.....120 Fulton.  
Miles, Geo.,.....West 1st cor. Granite.  
Robinson Boiler Works, 6 New, head of Maver-  
ick, E. B.  
Sim, Jas. D.,.....Champney near Lowland.  
Smith, David,.....86 Beverly.  
Souther, John & Co.,.....671 Dorchester Av.  
United States Patents Co.,.....276 Purchase.  
Whittier Machine Co.,.....1176 Tremont.

## BRASS FOUNDERS.

Anderson, Stephen,.....33 Hawkins.  
Blake, Wm. & Co.,.....Brighton cor. Allen.  
Boston Brass Co.,.....38 Oliver.  
Boston Machine Co.,.....Granite cor 1st.  
D'Eate, J. & Co.,.....59 Beverly.  
Foster, W. T. & Co.,.....178 Commercial.  
Grundy, Jas. & Co.,.....7 Province Court.  
Hill, Rowland,.....167 Border, E. B.  
Ingois, J. F. & Co.,.....113 A.  
Lennon & Co.,.....292 Washington.  
Litchfield, Wm., Austin nr. R. R. Crossing,  
Charlestown.

McGann, T. F.,.....104 Portland.  
Maverick Brass Foundry Co., 7 Exchange Place.  
Measures, Jos.,.....143 Portland.  
Morse, A. J. & Son,.....140 Congress.  
Mowry, Geo. J.,.....786 Washington.  
Mowry & Phillips,.....120 to 134 Cross.  
Payne, Elisha,.....72 Border, E. B.  
Peet Valve Co.,.....163 Albany.  
Scrannage, Brox. & Cook,.....79 Travers.  
Shreve, Crump & Son Mfg Co., 147 to 153 Colum-  
bus Av.  
Sweatt & Chase,.....82 Sudbury.  
Vannevar, E. B.,.....58 Fulton.  
Ward & Curley,.....62 Sudbury.

## COPPERSMITHS.

Badger, E. B. & Son,.....63 and 65 Pitts.  
Coltman & Co.,.....84 Marginal.  
Crocker Bros. & Co.,.....11 Broad.  
Docker & Holton,.....36 Chardon.  
Dudley & Reardon,.....28 Harvard.  
Hicks, S. D. & Son,.....9 and 11 Bowker.  
Lamont, J. G.,.....30 and 32 Beverly.  
Loring, A. B. & S. H.,.....36 Harrison Av.  
Morse, A. J. & Son,.....140 Congress.  
Sharp, David,.....31 W. First.  
Strater, H. & Sons,.....78 Sudbury.  
Stuart, W. J. & Co.,.....92 W. 2d.  
Vannevar, E. B.,.....58 Fulton.  
Waters, W. Jr.,.....104 Sumner, E. B.

## GAS FITTERS.

Bailey, G. S.,.....57 Warren, Charlestown.  
Bartlett, W. E.,.....389 B. W. Broadway.  
Bosworth, B. S.,.....10 Pleasant.  
Bosworth & French,.....392 Tremont.  
Buerkel & Co.,.....30 Union Park St.  
Canwell M.,.....73 Pitts.  
Carruthers, Henry & Co.,.....1 Maverick Sq.  
Chace, A. F. & Co.,.....55 Berkeley.  
Cooper, John,.....128 Harrison Av.  
Cosden, John W. & Co.,.....293 Hanover.  
Cummings, Henry,.....20 Chapman Pl.  
Dalton, John F.,.....152 Franklin.  
Davis, Lewis F.,.....Dorchester Av. Fields Corner.  
Davis, W. F.,.....Dorchester Av. nr Adams.  
Descalzo, L. & Co.,.....4 Charlestown.  
Drew & Coffin,.....52 Sudbury.  
Dudley, J. W.,.....6 Providence.  
Duquet, A. M.,.....90 Broad.  
Foster, F. W.,.....90 Friend.  
Franklin, A. B.,.....32 Charlestown.  
Gaffney, Jas.,.....419 Hanover.  
Grant, A. H.,.....1 Common.  
Hollings, R. & Co.,.....457 Washington.  
Holt, A. & Co.,.....38 Beach.  
Hooper, J. E.,.....1 Province Court.  
Houghton, A. B.,.....15 Pleasant.  
Johnson, L. F., B'way Extension, bet. Harrison  
and Wash'n.  
Keaton, A. J.,.....2301 Washington.  
Kennedy, John,.....6 Maverick Sq.  
Kesselhuth, T. H. Jr.,.....1 Eliot Sq.

## BOSTON—Continued.

Ladd, H. A.,	36 Brattle.
La Farge, Chas.,	957 Washington.
Lutted, Thos.,	395 W. Broadway.
Lynch, J. E.,	652 E. Broadway.
McGann, T. F.,	104 Portland.
McKenny, C. H. & Co.,	634 Washington.
McDonald, T. H.,	1644 Washington.
Marton, A. M. & Co.,	25 Washington.
Pierce, M. W. & Co.,	30 Friend.
Perry, J. P. & Co.,	123 Devonshire.
Pierce, Charles,	52 Charles.
Poole & Son,	32 Faneuil Hall Sq.
Russell & Burke,	18 Howard.
Sanborn, A. A.,	98 Milk.
Sawyer, E. G.,	13 City Hall Av.
Sheriffs, W. E.,	21 Devonshire.
Shreve, Crump & Son Mfg. Co.,	147 to 153 Columbus Av.
Shute, C. O.,	770 Tremont.
Skinner, H. A. & Co.,	33 Waltham.
Smith, Geo.,	141 Essex.
Smith & Hayden,	25 Beverly.
Stillman & Nicoll,	198 and 200 Tremont.
Titus, F. A.,	143 Main.
Turner, N. W. & Co.,	27 and 29 Bromfield.
Webster, Geo. H.,	229½ Bunker Hill.

## GAS FITTINGS AND FIXTURES.

Archer & Pancoast Mfg. Co.,	12 West.
Baguley, J. H.,	7 Province.
Blake, W. & Co.,	Brighton cor. Allen.
Bliss & Perkins,	27 West.
Hosworth & French,	392 Tremont.
Bradley & Hubbard Mfg. Co.,	27 Sumner.
Braman, Dow & Co.,	3 to 6 Haymarket Sq.
Bronnell & Poland,	71 Meridian.
Carruthers, H. & Co.,	1 Maverick Sq.
Cummings, Henry,	20 to 23 Chapman Pl.
Descalzo, L. & Co.,	4 Charlestown.
Fennelly, J. C.,	106 Sudbury.
Franklin, A. B.,	32 Charlestown.
Gilbert & Barker Mfg. Co.,	51 Union.
Hollings, R. & Co.,	547 Washington.
Hooper, J. E.,	1 Province Court.
Johnson, L. F., B'way Extension, bet. Harrison Av and Wash'n.	
McKenny, C. H. & Co.,	634 Wash'n.
Morton, A. M. & Co.,	25 Washington.
Pierce, M. W.,	30 Friend.
Shreve, Crump & Low,	432 Wash'n.
Slader, Frederick,	67 Warren.
Smith, Geo.,	141 Essex.
Stetson, S. A. & Co.,	19 West.
Stillman & Nicoll,	198 Tremont.
Tarbell, E. H.,	111 Wash'n.
Titus, F. A.,	143 Main.
Turner, N. W. & Co.,	27 and 29 Bromfield.
Walworth Mfg. Co.,	69 Kilby.

## IRON FOUNDERS.

Barstow Stove Co.,	56 Union.
Boston Machine Co.,	Granite cor. W. 1st.
Bowers, Geo. P.,	21 Wash'n.
Brown, Rufus G. & Co.,	26 Charlestown.
Burgess & Perry,	Amory nr Centre. Roxbury.
Central Iron Foundry	202 Border.
Chelmsford Foundry Co.,	131 Portland.
City Iron Foundry & Chain W'ks.,	198 W. 2d.
Estabrook, R. & Son	198 W. 2nd.
Franklin Foundry Co.,	48 Congress.
Fulton Iron Foundry Co.,	228 Franklin.
Grinnell, Edmund,	35 Hawley.
Gurney, Jas. & Co.,	202 Border.
Healey Iron Works,	35 Hawley.
Highland Foundry Co.,	89 North.
Hinckley Locomotive Co.,	439 Albany.
Howard, J. D.,	Earl, near Dorr.
Josselyn, Alonzo,	166 Ruggles.
Lincoln, R. B. & Son,	Foot of Alger.
Loring, Harrison,	E. 1st, near M.
Mechanics' Iron Foundry Co.,	Kemble, near Hampden.
Novelty Iron Foundry	Armory nr Centre.
Oakes M'fg Co.,	111 Washington.
Osgood & Hart,	3 Sherman, Charlestown.
Perkins, W. F.,	235 Washington.
Plymouth Foundry Co.,	63 Blackstone.

## BOSTON—Continued.

Smith, G. W. & F., Iron Co.,	409 Federal.
Smith & Anthony Stove Co.,	52 and 54 Union.
Somerville Iron Foundry	239 Causeway.
South Boston Iron Co.,	57 Foundry St.
Suffolk Iron Works,	Amory St., near Centre.
Taunton Iron Works Co.,	87 Blackstone.
Thayer, Ross & Co.,	50 Broad.
Tremont Iron Foundry Co.,	Hampshire, cor. Culvert.
Walker & Pratt Mfg. Co.,	31 Union.
Wollaston Foundry Co.,	60 Union.

## IRON AND STEEL.

Abbott, Jere & Co.,	35 Oliver.
Albany & Rennselaer Iron & Steel Co.,	10 Oliver.
Austin, F. B., & Co.,	91 North.
Bacon & Co.,	107 to 119 Oliver.
Bay State Iron Co.,	2 Pemberton Sq.
Bellows & Mauson,	77 Oliver.
Boyd & McIure,	5 Custom House St.
Brigham, Chas. E.,	22 Fulton.
Brown, John G., & Co.,	69 Purchase.
Budd & Ellis,	10 Oliver.
Cobb, M. L.,	38 Kilby.
Coffin, W. E., & Co.,	8 Oliver.
Comey, W. G.,	15 Foundry.
Cook, Isaac L.,	70 Kilby.
Curtis, N. & N. W.,	4 Post Office Square.
Cutler, E. P. & Co.,	15 Oliver.
Danvers Iron Works,	8 Oliver.
Dodge, Gilbert & Co.,	45 Oliver.
East Bridgewater Iron Co.,	81 Water.
Dunbar, Geo., & Co.,	109 Milk.
Franconia Iron & Steel Co.,	8 Oliver.
Fuller, Dana & Fitz,	110 North.
Glendon Iron Co.,	18 Post Office Sq.
Hoglund, N. M., Sons & Co.,	38 Kilby.
Holder & Herriek,	123 Milk.
Horne, W. M., & Co.,	10 Oliver.
Howdlette, F. A., & Co.,	19 Battery March.
Hussey, Howe & Co.,	127 Oliver.
Jessop, Wm., & Sons,	163 Fort Hill Sq.
Jones, B. M., & Co.,	11 and 13 Oliver.
Kent, John,	54 Kilby.
Leeds, Robinson & Co.,	55 and 57 North.
Lloyd & Symes,	13 Custom House St.
Lundberg, Gustav,	38 Kilby.
Lundell, Chas. G.,	7 Exchange Place.
McBarron & Co.,	30 Oliver.
McCann & Burns,	11 and 13 Fulton.
McClure & Field,	5 Custom House St.
McDonald, P. F.,	128 Oliver.
McLaughlin, Geo. T. & Co.,	120 Fulton.
May, Samuel, & Co.,	14 to 20 Oliver.
Nashua Iron & Steel Co.,	40 Water.
Naylor & Co.,	6 Oliver.
Osborn, Samuel & Co.,	11 and 13 Oliver.
Page, Newell & Co.,	139 Milk.
Park Bros. & Co.,	61 Oliver.
Pembroke Iron Co.,	8 Oliver.
Pittsfield Iron & Steel Co.,	79 Milk.
Priest, Page & Co.,	145 Franklin.
Richards, H. L.,	13 Custom House St.
Richards & Co.,	60 Union.
Richardson, Chas. T.,	41 Fulton.
Shepard & Co.,	164 State.
Sherman Process Co.,	9 Pemberton Square.
Snelling, S. G.,	40 Water.
Stevenson, Pierson & Co.,	44 Kilby.
Supple, Francis,	195 Dorchester Av.
Taft, John B.,	22 Pemberton Sq.
Taylor Bros. & Co.,	11 and 13 Oliver.
Tompkins, A. G. & Co.,	8 Oliver.
Wales, Geo. O., & Co.,	Mason Building.
Webb, Hart & Co.,	74 India.
Wetherell Bros.,	31 Oliver.
Wilkinson, A. J. & Co.,	184 to 188 Washington.
Wilder, G. G.,	Mason Building, Kilby St.
Williams, G. W. A.,	22 Central.
Williams, J. M. W.,	22 Central.
Wiswall, E. F., & Co.,	93 Oliver.

## MACHINERY AND MACHINISTS SUPPLIES.

American Tool & Machine Co.,	84 Kingston.
Ames M'fg Co.,	70 Kilby.
Armistead & Honeycomb,	142 Kneeland.
Ashcroft, Chas. E.,	235 Franklin.

## BOSTON—Continued.

Barton & Co.,	11 Chardon.
Boston Metal Cutting Co.,	178 Devonshire.
Brigham, E. A.,	186 Devonshire.
Davis, W. A.,	172 High.
Dodge, Gilbert & Co.,	45 Oliver.
Draper, Geo., & Sons,	60 Congress.
Dunbar, Geo., & Co.,	109 Milk.
Elliott M'f'g Co.,	262 Dover.
Farmer Lathe, Drill & Tool Co.,	19 Exchange Pl.
Field, W. F., & Son,	45 Charlestown.
Gillespie Governor Co.,	49 Purchase.
Goodnow & Wightman,	176 Washington.
Hanscom, J. M.,	First, cor. Foundry.
Harwood & Quincy,	220 Devonshire.
Hill, Clarke & Co.,	36 Oliver.
Holmes & Blanchard,	37 Charlestown.
Holt, Geo. F.,	77 Haverhill.
Holt, S. L., & Co.,	67 Sudbury.
Lane, S. G.,	17 Milk.
Leigh, F. A., & Co.,	40 Water.
Lund, S. A.,	71 Oliver.
McLaughlin, Geo. G.,	16 Lincoln.
May, Samuel, & Co.,	14 to 20 Oliver.
Miller, Geo. H.,	22 Dorchester Av.
Mowry & Phillips,	120 to 134 Cross.
Pratt, R. W.,	11 Travers.
Robinson, S. H., & Co.,	119 Haverhill.
Safford, M.,	178 Washington.
Scott, F. J.,	7 Union.
Suffolk Machine Co.,	45 Charlestown.
Taylor, W. O., & Co.,	11 Chardon.
Wainwright, C. D.,	3 Kilby.
Wilkinson, A. J., & Co.,	184 Washington.
Woods, S. A., Machine Co.,	172 High.

## MACHINISTS.

Abbott, J. F.,	49 Purchase.
Aldrich, H. P.,	11 Hawkins.
Allen Governor Co.,	98 Milk.
American Steam Gauge Co.,	36 Chardon.
American Tool & Machine Co.,	84 Kingston.
Anthony, Benj. F.,	162 Ruggles.
Ashcroft M'f'g Co.,	55 Sudbury.
Ashton Valve Co.,	271 Franklin.
Atlantic Works,	72 Border, E. B.
Barrett Bros.,	43 Haverhill.
Barton & Co.,	11 Chardon.
Bates, L. L., & Co.,	11 Chardon.
Baynton, Geo.,	Sandford, near Cedar, I. M.
Becker, John,	28 Oliver.
Bills, Chas. W.,	76 Sudbury.
Boston Blower Co.,	2 Foster's Wharf.
Boston Hydraulic Motor Co.,	70 Washington.
Boston Machine Co.,	Granite, cor. 1st.
Brinard Milling Machine Co.,	36 Oliver.
Brannan, Dow & Co.,	3 to 6 Haymarket Square.
Brooks, John,	35 Sudbury.
Burnett & Brown,	22 Bowker.
Buzzell, J. G., & Co.,	89 High.
Cainfield, F. P.,	96 Utica.
Carbee, M., & Co.,	87 Border.
Chapman Valve M'f'g Co.,	77 Kilby.
Chase, L. E.,	36 Charlestown.
Chubbuck, S. E., & Son,	971 Tremont.
Clark, J. H.,	29 Haverhill.
Coffin Valve Co.,	297 South.
Consolidated Safety Valve Co.,	55 Sudbury.
Cook, Rymes & Co.,	Water, cor. Chamber, Charlestown.
Crisp, J. E.,	32 Hawley.
Crosby Steam Gauge & Valve Co.,	97 Oliver St.
Crowther, Joseph,	35 Charlestown.
Daley, John,	35 Charlestown.
Daley & Son,	35 Sudbury.
Dewey, Edward & Co.,	34 Oliver.
Dewick, C. F., & Co.,	360 Dorchester Av.
Dill, Thos. B.,	15 Bowker.
Eddy, Sherman & Co.,	31 South.
Estaver, W. A.,	60 Bromfield.
Exeter Machine Works,	50 Federal.
Fifeid, C. S.,	53 High.
Fischer, W. E.,	76 Sudbury.
Fowler, C. H.,	Walk Hill, near Canterbury, Mt. Hope.
Galeucia, J. W., & Co.,	142 Kneeland.
Gav, Clapp & Co.,	370 Atlantic Av.
Golding & Co.,	183 to 193 Fort Hill Sq.

## BOSTON—Continued.

Graham, W. W. & Co.,	76 Sudbury.
Grant, Geo. B.,	1 Alden Court.
Gray, Joshua,	50 Sudbury.
Guptill, W. W.,	69 Haverhill.
Ham, L. M., & Co.,	168 Portland.
Hanks, W. R.,	376 Atlantic Av.
Haskell, Warren & Co.,	36 Charlestown.
Hawkins Machine Co.,	43 Beverly.
Hersey Bros.,	314 W. Second.
Hill, W. S.,	159 Beach.
Hinckley Locomotive Co.,	439 Albany.
Hodgkins, J. E.,	67 Charlestown.
Holmes, Chas.,	23 W. First.
Holmes & Blanchard,	37 Charlestown.
Holt, Geo. F.,	77 Haverhill.
Holt, S. L., & Co.,	67 Sudbury.
Howell, S. J.,	280 Dover.
Isele, A. W.,	51 Pitts.
Johnson, J. B.,	50 Bromfield.
Johnson, F. C., & Co.,	28 Beach.
Kidder Press M'f'g Co.,	148 High.
Kimball, C. E.,	191 Fort Hill Square.
Lawrie & Holmes,	189 Sumner, E. B.
Leach, Samuel F., & Co.,	82 Sudbury.
Leavitt, Thomas,	8 Province.
Leavitt & Field,	271 Franklin.
Litchfield & Crocker,	174 High.
Lockwood M'f'g Co.,	79 Sumner, E. B.
Loring, Harrison,	E. 1st, near M.
Lothrop, Geo. W.,	18 Harvard Place.
McLaughlin, Geo. T., & Co.,	120 Fulton.
Maloy, James W.,	63 Beverly.
Mason, J. M.,	121 Haverhill.
Mead, A. G.,	258 Purchase.
Meisel, Francis,	23 W. 1st.
Merritt, Benj.,	90 Utica.
Moore & Daly,	11 Chardon.
Moore & Wyman,	37 Foundry.
Nelson, F. J.,	173 Sumner.
Newell, J. S., & Co.,	71 Lincoln.
New England Gauge Co.,	380 Atlantic Av.
New England Machine Co.,	33 Haverhill.
Nutter, Barnes & Co.,	364 Atlantic Av.
Paine, J. H.,	36 Charlestown.
Partridge, A.,	121 Court.
Pest Valve Co.,	163 Albany.
Perkins, G. W., & Co.,	123 Devonshire.
Poland Bros.,	82 Sudbury.
Pratt, J. A.,	16 Lincoln.
Raenchie, W.,	86 Utica.
Roberts, Jas. A., & Co.,	118 Merrimac.
Robinson, F. S.,	75 Hanover.
Robinson, J. W.,	3 Lewis.
Robinson, S. H., & Co.,	119 Haverhill.
Rollins, C. C.,	121 Haverhill.
Ross Loom Co.,	85 Water.
Salomons, M. A., & Co.,	14 Province.
Sanford, E., & Son,	435 Atlantic Av.
Shapleigh, T. W., & Co.,	30 Hanover.
Shute, E. L.,	46 Federal.
Silsby, Thos. J., & Son,	Broadway Bridge.
Smith & Lovett,	125 to 129 Albany.
South Boston Iron Co.,	57 Foundry.
Souther, John, & Co.,	671 Dorchester Av.
Stone, Henry N.,	132 Commercial.
Stone, J. F., & Co.,	370 Atlantic Av.
Sturtevant, B. F.,	156 to 162 Oliver.
Suffolk Machine Co.,	45 Charlestown.
Summers, S. F.,	63 Beverly.
Taylor, W. O., & Co.,	11 Chardon.
Thomas, Carroll & Co.,	390 Federal.
Thomas, S. R.,	73 Dorchester Ave.
Tregurtha, James,	69 Haverhill.
Upham, T. A.,	17 Harvard Place.
Waldron, G. F.,	142 Kneeland.
Walker, G. A.,	35 Sudbury.
Warner, D.,	11 Chardon.
Waters Governor Works,	34 Oliver.
Webb & Watson,	17 Border.
Webster, Justus,	90 Sudbury.
Wentworth, Chas. A.,	112 Beach.
White, E. A.,	125 Albany.
Whitney, F. E.,	65 Sudbury.
Whittier Machine Co.,	79 Milk.
Wilder, Elihu,	216 Washington.
Winn, A. C.,	19 Harvard Place.
Wires, W.,	235 Washington.

## BOSTON—Continued.

Woodman, Robert.....	169 High.
Woods, John.....	23 W. First.
Woods, S. A., Machine Co.,.....	172 High.
Woodward, C. W., & Co.,.....	73 Oliver.
Young & Wheeler.....	55 Haverhill.

## PATTERN AND MODEL MAKERS.

Arnold, Henry.....	125 Albany.
Brooks, John.....	35 Sudbury.
Burley, John.....	36 Charlestown.
Chase, F. D.,.....	11 Chardon.
Coffin, G.,.....	8 Providence.
Dame & Griffiths.....	65 Sudbury.
Lewis, T. A.,.....	71 Dorchester Av.
Mizener, P. S.,.....	17 Harvard Place.
Newhall, J. O.,.....	65 Haverh. II.
Piccott, E.,.....	11 Chardon.
Smith, R. H.,.....	17 Harvard Place.
Snow, A.,.....	19 Harvard Place.
Turner, H.,.....	65 Haverhill.
Tuttle, A., & J. E.,.....	73 Haverhill.
Tw t-hell, M.,.....	17 Harvard Place.

## PLUMBERS.

Atwater, H. W.,.....	35 Hawley.
Baguley, J. H.,.....	7 Province.
Barrett, James.....	223 Tremont.
Barrett, John.....	33 Travers.
Bingham, O. N.,.....	15 Pleasant.
Blake, W. H. N.,.....	155 Eliot.
Bosworth & French.....	392 Tremont.
Boyd, J. S.,.....	198 Centre.
Boyd, Wm.,.....	1198 Harrison Av.
Bramhall, Wm.,.....	10 Blue Hill Av.
Huckley, Daniel.....	63 Dorchester.
Buckley, J. T.,.....	12 Brattle.
Buerkel & Co.,.....	30 Union Park St.
Burn, R. W.,.....	6 Blossom.
Calderwood, T.,.....	39 Merchants' Row.
Callahan & McLaughlin.....	37 Harvard.
Campbell, A.,.....	4 Main, Charlestown.
Cantwell, M.,.....	73 Pitts.
Capper, T. H.,.....	122 Mt. Vernon.
Carey, Thomas.....	1186 Tremont.
Carroll, C. H.,.....	121 Chelsea, Charlestown.
Carruthers, H., & Co.,.....	1 Maverick Square.
Cliney, James.....	30 W. Canton.
Coghlan, Francis.....	1810 Washington.
Collins, M. & H. H.,.....	2475 Washington.
Collman & Co.,.....	84 Marginal.
Conlon, John P.,.....	3 Stoddard.
Connell, Jas. O.,.....	Washington, Brighton.
Cooper, John.....	128 Harri-on Av.
Cosden, J. W., & Co.,.....	293 Hanover.
Coughlan, James.....	Dorchester Av. nr. Linden.
Coughlin, Francis.....	1810 Washington.
Coughlin, T. J.,.....	167 W. Broadway.
Cronin, J. F.,.....	27 Park, Charlestown.
Culbert, F. J.,.....	1055 Tremont.
Cunningham, L.,.....	586 Shawmut Av.
Curley, J. F.,.....	1 Eliot Sq.
Dacey, James F.,.....	342 Shawmut Av.
Dalton, J. F.,.....	162 Franklin.
Daly, W. A.,.....	62 Emerson.
Daniels, E. A.,.....	28 Portland.
Delany & Whitney.....	30 Cambridge.
Dolan, John.....	148 Richmond.
Donnell, F. P.,.....	295 Commercial.
Drake, G. A.,.....	443 W. Broadway.
Drake, R. H.,.....	16 Brattle Square.
Driscoll, C. F., & Co.,.....	100 Essex.
Drury, John.....	50 Cross.
Drury, Thos. J.,.....	60 Endicott.
Dudley, Jas. W.,.....	6 Providence.
Dudley & Reardon.....	28 Harvard.
Duggan, Thos. H.,.....	125 W. Brookline.
Dunn, John.....	114 Lincoln.
Eaton & Co.,.....	1 Milford.
Fallon, Joseph.....	Centre, cor. Eliot.
Fallon, T. F.,.....	1343 Tremont.
Farrell, M. F.,.....	190 Sumner, E. B.
Finnerty, D. G.,.....	25 Charles.
Fiske, O. J.,.....	33 Leverett.
Foley, J. T.,.....	Bellevue, cor. Centre, W. Roxbury.
Gaffney, James.....	419 Hanover.
Gallagher, W., & Co.,.....	5 W. Broadway.
Gay, C. M.,.....	66 Warren, Roxbury.

## BOSTON—Continued.

Gould, J. H.,.....	23 Travers.
Grant, A. H.,.....	1 Common.
Greenleaf, W. H.,.....	17 Charles.
Griffith, W. H., & Co.,.....	58 Anderson.
Gunning, M.,.....	13 Bennet.
Harney, Thos.,.....	13 Motte.
Hartnett, Florence J.,.....	137 Pleasant.
Hartnett, John.....	1 6 London, E. B.
Hartnett, M. H.,.....	8 Province Court.
Hartnett, T. J.,.....	72 Shawmut Av.
Hawkes & Crawford.....	50 Howard.
Hawthorne & Co.,.....	16 Province.
Hayes, James H.,.....	793 Tremont.
Henderson, W.,.....	2 Byron.
Hickey & Johnson.....	1186 Washington.
Hunt, T. W.,.....	Marston Av.
Huse, y, H.,.....	79 Kingston.
Johnson, L. F., Broadway Extension, bet, Harrison Av. and Washington.	
Jones, J. G.,.....	223 Main.
Kean, M. J.,.....	468 Tremont.
Kelley, J. E., & Co.,.....	1003 Washington.
Kelley, J. P.,.....	10 Roxbury.
Kelley, John C.,.....	1376 Tremont.
Lalley, A. J.,.....	43 Foundry.
Lathrop, G. H.,.....	23 Main.
Leah, P. J.,.....	72 Cabot.
Lewis, D. J.,.....	14 North Centre.
Locke, W. S.,.....	243 Federal.
Loring, A. B. & S. H.,.....	36 Harrison Av.
Loudon Bros.,.....	36 Province.
Lovett, T. F.,.....	192 Shawmut Av.
Lowell, R. M.,.....	36 Brattle.
Lumb, W., & Co.,.....	10 Province.
McAvoy, R. J.,.....	72 Warren Av.
McCann, G. J.,.....	3 Norman.
McDermott, Joseph.....	65 Chestnut.
McDonald, Thos. H.,.....	1644 Washington.
McGrath, James.....	381 Harrison Av.
Maguire, P.,.....	93 Leverett.
Maloney, R. H.,.....	390 Harrison Av.
Meroth, A.,.....	141 Shawmut Av.
Mills, W., & Co.,.....	237 Washington.
Mitchell, Frank.....	191 Endicott.
Moore, E.,.....	18 Causeway.
Moore, W. B., & Son.....	4 and 6 Friend.
Moran, J. P.,.....	1 Park, Charlestown.
Mungovan, James G.,.....	17 La Grange.
Murphy, P. H.,.....	35 Clarendon.
Murtagh, W. J.,.....	7 Church.
Neagle, W.,.....	21 Congress Sq.
Noonan, J. W.,.....	150 Meridian.
O'Donnell, Henry.....	55 Leverett.
O'Rourke, Hugh.....	30 Prince.
Owens, P. J.,.....	95 Eustis.
Perkins, W. D.,.....	2160 Washing n.
Perry, J. P. & Co.,.....	123 Devonshire.
Pierce, Chas.,.....	52 Charles.
Poole & Son,.....	32 Fanenil Hall Sq.
Power, M.,.....	1114 Washington.
Quinlin, P. J.,.....	223 Tremont.
Rafferty, Thomas.....	85 Union.
Ratigan, Thomas.....	77 Tremont.
Reardon, W. B.,.....	380 Warren, Roxbury.
Rehm, Frank W.,.....	1461 Tremont.
Richards, W. H.,.....	2148 Washington.
Richardson, I. F.,.....	33 Waltham.
Riley & Hill.....	85 Joy.
Ross, John.....	652 E. Broadway.
Ryan, P.,.....	16 Bedford.
Santry, J. P.,.....	363 Shawmut Av.
Scannell, J. F.,.....	2 Battery-march.
Shannon, D.,.....	98 W. Dedham.
Sheehan, J. M.,.....	63 Warren, Roxbury.
Sheriff, W. E.,.....	21 Devonshire.
Skinner, H. A. & Co.,.....	33 Waltham.
Smith, Geo.,.....	141 Essex.
Smith & Forbes.....	129 W. Canton.
Snow, H. A.,.....	2 Shawmut Av.
Spear, B. P. & Son,.....	90 Warren, Charlestown.
Stelberger, Andrew.....	280 Centre, Roxbury.
Stewart, S. B.,.....	2783 Washington.
Stimpson, J. M.,.....	1966 Washington.
Swift, J. B.,.....	51 Merrimac.
Titus, F. A.,.....	143 Main, Charlestown.
Toland, John A.,.....	Adams, Field's Corner.
Tombs, H. W.,.....	717 Tremont.



**BOSTON—Continued.**

Tompkins, Franklin,	86 Union.
Trainer, W.,	3 Park Square.
Tucker, I. N.,	479 Tremont.
Tucker & Titus,	9 Pemberton Sq.
Tudor, Frederick & Co.,	14 Pemberton Sq.
Tulley, John K.,	1400 Tremont.
Tute, T. J.,	77 Church.
Umberhand, P.,	Centre, opp. Starr Lane.
Vannevar, E. B.,	58 Fulton.
Walsh, M.,	4 Charlestown.
Waters, W., Jr.,	104 Sumner, E. B.
Webber, F. W.,	198 Shawmut Av.
Webster, Geo. H.,	229½ Bunker Hill.
Weeks, P. A.,	3½ Telegraph.
Welch, E. J.,	144 Northampton.
Wilson, V. L.,	355 W. Broadway.
Zane, Joseph & Co.,	81 Sudbury.

**PLUMBERS' SUPPLIES.**

Boston Lead Mfg Co.,	24 & 26 Oliver.
Crocker Bros. & Co.,	11 Broad.
Dalton & Ingersoll,	17 & 19 Union.
Lennon & Co.,	272 Washington.
Paul, Geo. K. & Co.,	98 Milk.
Phillips & Weeden,	84 North.
Scrannage Bros. & Cook,	79 Travers.
Stults & Mansur,	56 Elm.
Zane, Joseph & Co.,	81 Sudbury.

**RAILROAD SUPPLIES.**

Allston Carr-Wheel Co.,	Allston.
American Freight Car-Heater Co.,	55 Charlestown.
American R.R. Joint Co.,	17 Milk.
American Standard Brake Co.,	40 Water.
Ashcroft Mfg Co.,	55 Sudbury.
Bishop, Robert,	157 W. 6th.
Blackburn, S. P. & Co.,	370 Atlantic Av.
Blake, Geo. F., Mfg Co.,	44 Washington.
Budd & Ellis,	10 Oliver.
Colwell & Canning,	38 Water.
Continental Construction Co.,	3 Exchange Pl.
Dewey, F. O. & Sons,	28 Canal.
Dodge, Gilbert & Co.,	45 Oliver.
Dunbar, Geo. & Co.,	109 Milk.
Follansbee Pump Co.,	26 Soley, Charlestown.
French, A. & Co.,	109 Milk.
Fuller, Dana & Fitz,	110 North.
Gordon & Duggan Safety Switch Co.,	28 State.
Granular Metal Co.,	7 Exchange Place.
Knowles Steam Pump Works,	44 Washington.
Leach, H. L.,	77 Water.
Lothrop, T. C. & Co.,	60 Federal.
Mass. Portable Railroad Co.,	230 Washington.
May, Samuel & Co.,	16 Oliver.
McLaughlin, Geo. T. & Co.,	120 Fulton.
McLeod Air Railroad Signal Co.,	31 Milk.
National Anti-Friction Car-Box Co.,	66 Sudbury.
New England Car Co.,	48 Congress.
New England Car-Spring Co.,	9 Doane.
Nightingale, S. C. & Childs,	128 Oliver.
Otis, S. A.,	7 Exchange Place.
Packard and Burrill,	8 Union.
Province Tool Co.,	13 Pearl.
Putnam, G. D. & Co.,	127 Milk.
Richards' Car-Perch Co.,	41 Tremont.
Sherburne & Co.,	53 Oliver.
Standard Spike Mfg Co.,	43 Milk.
Thayer & Ross,	50 Broad.
Turton, Thos. & Sons,	40 Kilby.
Williams, Page & Co.,	24 & 26 Beach.
Worthington, Henry R.,	70 Kilby.

**SHIPSMITHS.**

Bassett, Z. & Son,	21 Eastern Av.
Brown & Hall,	312 Dorchester Av.
Emery, E. O.,	13 Sumner, E. B.
Fitch & Joy,	377 Commercial.
Hathaway, J.,	116 Border.
Hathaway, Samuel,	154 Border.
Hunter, R.,	28 New, E. B.
Johnson, E.,	266 Marginal.
Keniston, J. R.,	297 Border.
Leman, J. G.,	395 Atlantic Av.
Lewis, Geo. B. & Co.,	93 Border.
Lewis & Scott,	346 Atlantic Av.
Lurkin, Nathaniel,	136 Bremen.

**BOSTON—Continued.**

Mitchell, Wm. A.,	163 Sumner, E. B.
Nute, A. H.,	79 Sumner, E. B.
Russell, L. B.,	215 Commercial.
Thomas & McFarland,	387 Commercial.

**STEAM ENGINE BUILDERS.**

Bills, C. W.,	76 Sudbury.
Brayton Petroleum Engine Co.,	50 Federal.
Holmes & Blanchard,	37 Charlestown.
Chubbuck, S. E. & Son,	971 Tremont.
Lockwood Mfg Co.,	79 Sumner, E. B.
McLaughlin, Geo. T. & Co.,	120 Fulton.
Osborne Engine & Mfg Co.,	142 Border, E. B.
Paine, J. H.,	36 Charlestown.
Roberts, James H. & Co.,	118 Merrimac.
Sturtevant, B. F.,	156 to 162 Oliver.

**STEAM FITTERS.**

Braman, Dow & Co.,	3 to 6 Haymarket Sq.
Buerkel & Co.,	30 Union Park St.
Costello, William,	43 Foundry.
Descalzo, L. & Co.,	4 Charle-town.
Franklin, A. B.,	32 Charlestown.
Holt, A.,	38 Beach.
Huntson, C. W.,	69 Kilby.
Ingalls & Hendricksen,	80 Sudbury.
Le Bosquet Bros.,	75 Union.
Little, David,	61 Haverhill.
Lynch, John E.,	652 E. Broadway.
McDonald, T. H.,	1644 Washington.
McGann, T. F.,	104 Portland.
Newton, Wm.,	Wareham cor. Malden.
Pierce, M. W. & Co.,	90 Friend.
Perry, J. P. & Co.,	123 Devonshire.
Poole & Son,	32 Faneuil Hall Sq.
Russell & Burke,	18 Howard.
Sanborn, A. A.,	98 Milk.
Smith & Hayden,	25 Beverly.
Whiteley, E.,	61 Charlestown.

**STEAM, GAS AND WATER PIPE MANUF'RS.**

American Tube & Iron Co.,	28 School.
Ashcroft, Chas. E.,	235 Franklin.
Braman, Dow & Co.,	3 to 6 Haymarket Sq.
Cunningham Iron Works,	Charlestown.
Drew & Coffin,	52 Sudbury.
Franklin, A. B.,	32 Charlestown.
Gallison, W. H.,	36 Oliver.
Langford, Jno. T.,	70 Kilby.
Morton, A. M. & Co.,	25 Washington.
National Tube Works,	8 Pemberton Sq.
Paul, Geo. K. & Co.,	98 Milk.
Sumner & Goodwin,	21 Oliver.
Walworth Mfg Co.,	69 Kilby.
Woodman, Geo. & Co.,	41 Pearl.

**STEEL MANUFACTURERS.**

Firth, Thos. & Sons,	35 Oliver.
Hallamshire Steel & File Co.,	125 Pearl.
Jessop, Wm. & Sons,	163 Fort Hill Sq.
Jones, B. M. & Co.,	11 & 13 Oliver.
La Belle Steel Works,	31 Oliver.
Nashua Iron & Steel Co.,	40 Water.
Naylor & Co.,	6 Oliver.
Norway Steel & Iron Works,	363 Dorchester Av.
Park Bros. & Co.,	61 Oliver.
Perry, F. R.,	127 Oliver.
Sanderson Bros. Steel Co.,	39 Fort Hill Sq.
Smith, Sutton & Co.,	31 Oliver.
Sweet Mfg. Co.,	3 Fort Hill Sq.
Wetherell Bros.,	31 Oliver.

**MISCELLANEOUS.**

Alden, W. E., Mfr. Springs,	12 Charlestown.
American Steam Appliance Co.,	Steam Regulators, 62 Sudbury.
American Tube Wks.,	Mfrs. Brass Tubes, 97 State.
Ames, Oliver & Sons, Corporation,	Mfrs. Shovels, 47 Equitable Building.
Bartlett, B. N., Millwright,	30 Hanover.
Beard, Luke, Mfr. Springs,	63 Court.
Boston Car Spring Co.,	Mfrs. Springs, 11 Federal.
Boston Forge Co.,	340 Maverick, E. B.
Boston Nut Co.,	92 Broad.
Boyd, G. E.,	New York & New England R.R.
Brewster, Chas. W.,	Mfr. Springs, 29 Bowmer.
Bubier & Co.,	Mfrs. Bronzed Goods, 63 Merrimac.
Burney & Burrell,	Mfrs. Saws, 31 Beverly St.

**BOSTON—Continued.**

Clemson & Co., Mfrs. Saws.....	215 Franklin.
Coley, Thos., Mfr. Chains, 305 Medford, Charlestown.	
Coolidge, Geo. A.....	Fitchburg R.R.
Crosby Steam Gauge & Valve Co.....	97 Oliver.
Danahy, D. & S. n.....	204 Washington.
Dinsmore Mfg. Co., Mill Supplies.....	43 West.
Douglass Axe Mfg Co.....	217 Federal.
Estabrook, Wires & Co., Mfrs. Clinching Screws,	105 Summer.
Fearing, H. L. & Co., Mfrs. Chains, 91 Commercial.	
Ferrin, Stephen A., Mfr. Files.....	248 Charles.
Folson, J. L., Boston, Revere Beach & Lynn R.R.	
Foxwell, Benj., Iron Worker.....	661 Parker.
Go-man, M., Mfr. Files.....	492 Beverly.
Hall, W. & Co., Mfrs. Locks.....	4 Dock Street.
Hallahan, John, Mfr. Mill Picks.....	17 Bowker.
Hallamshire Steel & File Co.....	125 Pearl.
Hancock Inspirator Co.....	30 Beach.
Hayward, H. M., Mfr. Saws.....	36 Battery-march.
Hayward, L. H., Sheet Iron Worker.....	6 Chamber,
Charlestown.	
Hill, Warren, Mfr. Punches.....	233 Friend.
Holbrook, F. F., Mfr. Plows.....	5 Chatham Row.
Isham Bank Lock Co., Mfrs. Locks, 82 Devonshire	
Kilner, James, Mfr. Files.....	40 Dorchester Av.
Linden Spring Co., Mfrs. Springs.....	29 Oliver.
Marston, I. G. & Co., Mfrs. Saws.....	352 Atlantic Av.
Moore Bros., Mfrs. Files.....	95 Border, E. B.
Morse, E. R. & Co., Mfrs. Safes.....	74 Sudbury.
Morton, A. M. & Co., Boiler Tubes & Rivets,	25 Washington.
Mount Hope Iron Co., Mfrs. Nails.....	137 Milk.
Old Colony Iron Co.,.....	Mfrs. Nails & Shovels,
36 Broad.	
Page, H. S., Mfr. Locks.....	220 Washington.
Pillsbury, Amos.....	Eastern R.R.
Pope Mfg. Co., Mfrs. Bicycles.....	87 Summer.
Preston, W. B. & Son, Mfrs. Scales.....	14 Portland.
Putnam Nail Co., Mfrs. Nails, Ericsson op. Walnut.	
Rait, James, Mfr. Brass Goods.....	65 Chauncy.
Richards, Geo.,.....	Boston & Providence R.R.
Robinson, E., Mfr. Locks.....	21 Brattle.
Rock Drill Mfrg. Co.....	79 Water.
Rogers & Sheldon, Mfrs. Nails.....	81 Water.
Ryerson, S. C. & Co., Mfrs. Edge Tools.....	Kemble,
near Hampden.	
Sargent & Greenleaf, Mfrs. Locks.....	57 Sudbury.
Seaville Mfg. Co., Sht. Brass, &c.....	177 Devonshire.
Squires & Pratt, Mfrs. Locks.....	59 Sudbury.
Smith & Townsend, Ship Builders.....	374 Border.
Steel, H. W., Millwright.....	1176 Fremont.
Sunderland & Ogden, Mfrs. Files. P. cor. E. 1st St.	
Sylvester & Co., Mfrs. Spikes.....	6 Oliver.
Taylor, J. R.,.....	Old Colony R.R.
Taylor S. K. & Co., Die Cutters.....	11 Hawkins.
Tremont Nail Co., Mfrs. Nails.....	17 Oliver.
Tubular Rivet Co., Mfrs. Rivets.....	55 Lincoln.
Tucker Mfg. Co.,.....	Mfrs. Iron Bedsteads,
70 Washington.	
Turner, G. W. & Ross,.....	Mfrs. Fire Arms,
16 & 17 Dock Sq.	
Tuttle, J. D., Mfr. Springs.....	10 Swan.
Underhill Bros., Mfrs. Edge Tools.....	71 Haverhill.
Wait, F. A.....	Boston & Maine R.R.
Welch & Griffith, Mfrs. Saws.....	91 Water.
Whitman & Barnes Mfg. Co., Mfrs. Mower Knives,	32 S. Market.

**BRADFORD.**

Day, Frank.....Machinist.

**BRAINTREE.**

Stevens &amp; Willis.....Mfrs. Tacks.

**BRIDGEWATER.**

Andrews, Lloyd.....Machinist.  
 Bartlett, Jno. A.....Mfr. Nails.  
 Bridgewater Iron Co.....Founders & Machinists.  
 Eagle Cotton Gin Co.  
 Harlow, C. C. & Co.....Machinists.  
 Perkins, Henry.....Iron Founder.

**BROCKTON.**

Alden & Ruberg.....Mfrs. Tacks.  
 Cross, W. W. & Co.....Mfrs. Nails.  
 Goddard, Shaw & Co.....Machinists.  
 Harlow, C. C. & Co.....Machinists.

**BROCKTON—Continued.**

Harmon, A. C.....	Mfr. Dies.
Kent, James A.....	Plumber & Gas Fitter.
Kinney Bros.....	Plumbers.
Lynch, Daniel.....	Plumber.
Mann, Jacob B.....	Mfr. Edge Tools.
Merton, E. S.....	Machinist.
Reed Bros.....	Mfrs. Tacks.
Remillard, D.....	Mfr. Dies.
Reynolds, E. D. & O. B.....	Mfrs. Agl. Impls.
Shell, E. S. & Co.....	Mfrs. Tools.
Shephard, R. G.....	Gas & Steam Fitter.
Snell & Atherton.....	Mfrs. Edge Tools.
Stoddard, A. P.....	Machinist.
Stone, C. & Sons.....	Machinery.
Sweetser & Merritt.....	Machinists.
Tuck Mfg. Co.....	Mfrs. Edge Tools.
Weston, Alonzo.....	Mfr. Edge Tools.
Williams & Belcher.....	Machinists.

**BROOKLINE.**

Allen, E. F.....	Gas Fitter.
Keegan, Jno. Jr.....	Plumber.
Kenrick Bros.....	Plumbers.
Mahon, Thomas.....	Plumber.
Mayo & Paine.....	Plumbers.
Pree, Wm.....	Mfr. Cutlery.
Stetson, A. H.....	Mfr. Models.
Sullivan, F.....	Gas Fitter.
Wallaston, J. W.....	Gas Fitter.

**BUCKLAND.**

Buckland File Works.....	Mfrs. Files.
Clark, W.....	Mfr. Files.
Lam-on & Goodnow Mfg. Co.....	Mfrs. Cutlery.
Pratt, Z. E.....	Machinist.

**CAMBRIDGE.**

Adams, John P.....	Gas Fitter.
Baumeister, A.....	Plumber.
Clark, T. C., & Co.....	Plumbers.
James, Jno. K.....	Plumber.
Moore, Charles & Co.....	Plumbers.
Phelan, John F.....	Plumber.

**CAMBRIDGEPORT.****PLUMBERS, STEAM AND GAS FITTERS.**

Bates, Edward.....	Reld, J. A.
Dickson, G. F.....	Smith, J. C.
Greene & Co.....	Snow, H. A.
Greenleaf, Geo. W.....	Stayner, W. R.
Hawkes, Levi & Co.....	Stevens, J. H., & Co.

**MISCELLANEOUS.**

Andrews, D. H.....	Iron Worker.
Bird, H. M.....	Iron Founder.
Boston Bolt & Nut Co.	
Brown, James R.....	Mfr. Cutlery.
Bullock, O. S.....	Machinist.
Cambridge Rolling Mills.	
Campbell, Wm. & Co.....	Boiler Makers.
Cooper Elastic Steel Wheel Co.....	Mfrs. Car Wheels.
Dunnels & Kohr.....	Mfrs. Bolts and Nuts.
Gilmore & Eustis.....	Rolling Mills.
Hubbard Car Spring Co.....	Mfrs. Car Springs.
Hooker, C. K.....	Boiler Maker.
Kendall & Roberts.....	Boiler Makers.
Landerkin, L.....	Machinist.
Morrill & Allen.....	Machinists.
Nutting, J. D.....	Mfr. Hardware.
Walworth Mfg. Co.....	Brass Founders.

**CANTON.**

Belcher, Clifford.....	Iron Founder.
Kinsley Iron & Machine Co.....	Bolts, Nuts, &c.
Lonergerin, Thomas.....	Machinist.
Reed, Franklin.....	Mfr. Edge Tools.
Revere Copper Co.	

**CARVER.**

Pratt, M. &amp; J.....Iron Founders.

**CHARLTON.**

Hecox, John.....Machinist.

**CHARLTON DEPOT.**

Hammond, Henry.....Machinist.

**CHELMSFORD.**

Chelmsford Foundry Co  
 Reed, Franklin.....Machinist.  
 Shed, John S.....Mfr. Plows.

**CHELSEA.**

**PLUMBERS, STEAM AND GAS FITTERS.**  
 Betton, John.....Kent, H., & Son.  
 Cassell Bros.....Newhall, Luther & Co.  
 Chase & Co.....Oxton, C. F.  
 Harris, John.....Reed, Charles H.  
 Healey, T. P.....Spad, Charles E.  
 Hebblethwaite, J.....Winslow, Frank E.  
 Jones, Wm.....

**MISCELLANEOUS.**

Bisbee, Endicott & Co.....Iron Founders.  
 Davis, Wm. L., & Co.....Mfrs. Hardware.  
 Ewing Bros.....Machinists.  
 Lovewell, S. K., & Co.....Machinists.  
 Magee Furnace Co.....Stove Founders.  
 Peverly, R. H.....Brass Founder.  
 Sidelinger, M., & Co.....Shipsmiths.  
 Spade, William.....Coppersmith.

**CHESTERFIELD.**

Bryant, Patrick.....Sheet Iron Worker.  
 Eddy, H. L.....Mfr. Gun Tubes.  
 Higgin & Cleveland.....Mfrs. Gun Tubes.  
 Week, H. A.....Mfr. Edge Tools.

**CHICOPEE.**

Ames Mfg. Co.....Machinists.  
 Ames Sword Co.....Mfrs. Swords.  
 Eldredge Sewing Machine Co.  
 Gaylord Mfg. Co.....Brass Founders.  
 Lowell Gun Co.....Mfrs. Fire Arms.

**CHICOPEE FALLS.**

Belsher, B. & J. W.....Mfrs. Agl. Impts.  
 Belcher & Taylor Agl. Tool Co.  
 Lamb Knitting Machine Co.  
 Mass. Arms Co.....Fire Arms.  
 Page, Amos W.....Mfr. Needles.  
 Stevens, J. & Co.....Mfrs. Fire Arms.  
 Whittemore, Jno. R.....Mfr. Agl. Impts.

**CLINTON.**

Clinton Foundry Co.  
 Palmer, Gilman M.....Iron Founder.  
 Parker, J. B., Machine Co.....Machinists.

**COCHITUATE.**

Connors, J. R.....Plumber.

**COLDBROOK SPRINGS.**

Field, Samuel.....Machinist.  
 Matthews, A. H.....Mfr. Plows.

**COLERAINE.**

Call, John C.....Iron Founder.  
 Maxam, Samuel N.....Iron Founder.

**CONCORD.**

Hatch, M. L.....Plumber.

**CONWAY.**

Thwing, E. G.....Mfr. Rakes, etc.

**CURTISVILLE.**

Burghardt, J. H. & Co.....Founders & Machinists.

**DALTON.**

Fillio, E.....Machinist.  
 Smith, John D.....Machinist.

**DANVERS.**

Caskins, O'Connell & Co.....Plumbers.  
 Danvers Iron Works.  
 Harrigan, D. J.....Plumber.  
 Peaslee, H. & Son.....Stove Founders.  
 Perkins, C. F. & Co.....Plumbers.  
 Thompkins, A. G. & Co.....Iron Founders.

**DARTMOUTH.**

Read, S. D.....Machinist.

**DEDHAM.**

Bestwick, John.....Gas Fitter.  
 Kennedy, J. A.....Sheet Iron Worker.

**DIGHTON.**

Dighton Furnace Co.....Stove Founders.

**EAST BRAINTREE.**

Crocker, L. O.....Mfr. Ticket Punches.

**EAST BRIDGEWATER.**

Bates, J. A.....Machinist.  
 Burrill, Jarvis.....Machinist.  
 Carver, Cotton Gin Co.....Machinery, etc.  
 Dean, J. L.....Iron Founder.  
 East Bridgewater Iron Co.....Mfrs. Nails.  
 Keen, Samuel & Co.....Machinists.  
 Mount Hope Iron Co.....Mfrs. Nail.  
 Reed Bros.....Rolling Mill.  
 Rogers & Sheldon.....Mfrs. Nails.

**EAST BROOKFIELD.**

Avery, John G.....Machinist.  
 Hobbs, M. & J.....Machinists.  
 King, W. H.....Iron Founder.  
 Moulton, J. E.....Iron Founder.  
 Tucker, W.....Machinist.

**EAST CAMBRIDGE.**

Collins, Dennis.....Plumber.  
 Davlin, M. F.....Plumber.  
 Draper, F. & Co.....Mfrs. Brass Ware.  
 Green, D. P. & Co.....Mfrs. Car Wheels.  
 Hofer, F.....Mfr. Tools.  
 Jones, S. C.....Machinist.  
 Long, J. J.....Plumber.  
 Walking, F. L.....Brass Worker.

**EAST DOUGLAS.**

Douglas Axe Mfg. Co.

**EAST GLOUCESTER.**

Benton, Thos.....Plumber.  
 McCurdy, Alex.....Shipsmith.

**EAST HAMPTON.**

Manchester, G. L.....Plumber & Steam Fitter.  
 Mayer, John.....Mfr. Steam Pumps.  
 Valley Machine Co.....Machinists.

**EAST LEE.**

Dowd, J.....Mfr. Machine Knives.

**EAST PEPPERELL.**

Blake Bros.....Machinists.

**EAST SAUGUS.**

Andrews, F. & Son.....Plumbers.

**EAST SOMERVILLE.**

Locke, S. B. & Co.....Iron Founders.  
 Spencer, T. E.....Plumber.

**EAST STOUGHTON.**

Stockwell, O.....Plumber.

**EAST TAUNTON.**

Old Colony Iron Co.....Mfrs. Nails, Shovels, etc.

**EASTON.**

Belcher, D.....Iron Castings.  
 Dean, T. H. & J. O.....Machinists.  
 Drake, L. S. & A. L.....Iron Founders.  
 Gilmore, E. W. & Co.....Mfrs. Hardware.  
 King, Wm.....Mfr. Tools.  
 Oliver, Ames & Son Corporation.....Mfrs. Shovels.

**EAST WEYMOUTH.**

Powers, E. B.....Machinist.  
 Weymouth Iron Co.....Mfrs. Nails.

**EAST WINDSOR.**

Jordon, G. J.....Machinist.

**ELMWOOD.**

Keen, Samuel & Co.....Machinists.

**ENFIELD.**

Chandler, W. F.....Machinist.  
 Elwell, W. P.....Machinist.

ERVING.

Millers Falls Co.....Mfrs. Tools.  
Spring, E. H.....Mfr. Saddlery Hdw.

FAIRHAVEN.

American Tack Co.....Mfrs. Tacks.  
Fairhaven Iron Works.....Iron-Castings.  
Winslow, John.....Brass Founder.

FALL RIVER.

Albro, Chase & Reed.....Machinists.  
Broughton & Sunderland.....Mfrs. Files.  
Bush, Chas. H.....Coppersmith.  
Bush, W. R.....Brass Founder.  
Clarkson, Alfred.....Plumber, Steam and Gas F'r.  
Clary, M.....Plumber.  
Congdon, Carpenter & Co.....Iron and Steel.  
Cook & Grew.....Plumbers.  
Covel Machine Co.....Machinists.  
Donovan, J. F.....Plumber.  
Doran, John F.....Plumber.  
Eagle Stove Foundry Co.  
Fall River Boiler Works.  
Fall River Iron Works Co.....Boiler Makers.  
Fall River Machine Co.  
Fall River Plumbing Co.  
Fall River Steam & Gas Pipe Co.  
Farwell & Burdick.....Plumbers.  
Hawes, W. M.....Machinery.  
Kay, Henry E.....Machinist.  
Kelley, Edward.....Boiler Maker.  
Kilburn, Lincoln & Co.....Machinists.  
Seymour, Alvin C.....Machinist.  
Thurston, A. G. & Son.....Machinists.  
Wolfendale, Wm.....Plumber.  
Wood, James.....Mfr. Copper Tubes.

FALMOUTH.

Hewins, C. S.....Sheet Iron Worker.

FISKDALE.

Snell Mfg. Co.....Mfrs. Augers and Bits.

FITCHBURG.

MACHINISTS.

Brown, C. H. & Co. New England Machine  
Crowley, C. H. Co.  
Fitchburg Machine Wks. Putnam Machine Co.  
Fitchburg Novelty W'ks. Rollstone Machine Co.  
Fitchburg Steam Engine Sawyer, Sylvanus.  
Co. Stratton, Jos. L.  
Flint, C. M. & Co. Thompson, Alexander.  
Foster, C. A. & Co. Tolman, Cyrus S.  
Hubbard, A. W. Tyrell, H. P.  
Lovell, F. S. Waymouth, A. D. & Co.

MISCELLANEOUS.

Burke, S. M.....Gas Fitter.  
Burleigh Rock Drill Co.  
Converse, C. M.....Plumber.  
Cully, Eli.....Mfr. Files.  
Davies, Ezekiel.....Mfr. Paper Mill Knives.  
Dillon, David M.....Boiler Maker.  
Goodman, Lyman H.....Iron Founder.  
Hardy, W. A.....Brass Founder.  
Heywood, Wilson & Co.....Iron Founders.  
Johnson, W. C.....Machinery.  
Leonard, R. A.....Mfr. Mowing Machines.  
Parks & Carpenter.....Steam and Gas Fitters.  
Robbins, G. O. & Co.....Mfrs. Steam and Gas Pipe.  
Sheldon & Co.....Millwrights.  
Simonds Mfg. Co.....Mfrs. Circular Saws.  
Union Machine Co.....Paper Machinery.  
Wildner, Chas. W.....Mfr. Tools.  
Wright, Isaac C.....Iron & Steel.

FLORENCE.

Couch, B. M.....Machinist.  
Florence Machine Co.....Mfrs. Skates, et.  
Florence, Tack Co.....Mfrs. Tacks.

FOXBOROUGH.

Corney, Jas. A.....Iron etc.  
Foxborough Foundry & Machine Co.  
Roary Shuttle Sewing Machine Co.

FRANKLIN.

Clark, J. W.....Machinist.

FREETOWN.

Davis, N. R. & Co.....Mfrs. Guns.  
Star Tack Co.....Mfrs. Tacks.

GARDNER.

Burke, T. M.....Steam Fitter.  
Donnelly, James.....Plumber.  
Heywood Foundry Co.....Stove Founders.  
Lockwood, A. L.....Brass Founder.  
Lockwood, L. B.....Machinist.  
McKnight, L. G. & Co.....Machinists.

GILBERTSVILLE.

Cobb, A.....Machinist.  
Wiley, A. L.....Machinist.

GLOUCESTER.

Bishop & Murphy.....Shipsmiths.  
Cape Ann Anchor Works.....Mfrs. Anchors.  
Coas, E. K.....Plumber.  
Cochran, Chas. W.....Gas Fitter.  
Harvey, Geo.....Shipsmith.  
Mayo, I. C.....Plumber.  
Richardson, Nathan.....Machinist.  
Robinson, W. H.....Shipsmith.  
Stoddart, A. P.....Machinist.  
Voss, A.....Shipsmith.

GRANITEVILLE.

Sargent's, Chas. G. Sons.....Machinists.

GRANVILLE CORNERS.

Collins, D. P.....Mfr. Tacks.  
Holcomb, C.....Machinist.  
Holcomb, Edgar.....Mfr. Sewing Machines.

GREAT BARRINGTON.

Foot, J. S.....Machinist.  
Richmond Iron Works.  
Robbins, H. T.....Gas Fitter.

GREENFIELD.

Allen's, S. Sons.....Iron & Steel.  
Greenfield Co-operative Mfg. Co.....Mfrs. Cutlery.  
Greenfield Tool Co.....Mfrs. Edge Tools.  
Munson, J. M.....Machinist.  
Porter, James.....Plumber & Gas Fitter.  
Reese Bros.....Machinists.  
Sheldon & Newcomb.....Iron & Steel.  
Warner Mfg. Co.....Mfrs. Hardware.  
Wells Bros. & Co.....Machinists.  
Whipple, R. P.....Gas Fitter.  
Wiley & Russell Mfg. Co.....Machinists.

GROTON.

Blood, A. A.....Copper Works.

GROVELAND.

Clough, Eugene.....Machinist.

HANCOCK.

Taylor, John.....Iron Founder.  
Whitaker, S.....Mfr. Plows.  
Whitaker, Wm.....Iron Castings.

HANOVER.

Salmond, Samuel & Co.....Mfrs. Tacks.  
Tolman, J. T. & S.....Mfrs. Tacks.  
Waterman, L. C. & Sons.....Mfrs. Tacks.

HANSON.

Briggs, E. B. & Co.....Mfrs. Tacks.  
Cushing Bros.....Mfrs. Nails & Tacks.  
Phillips, Ezra & Sons.....Mfrs. Tacks.

HARTVILLE.

Sheldon, G. S.....Machinist.

HARWICH.

Bee, B. L.....Machinist.

HATFIELD.

Porter, John E.....Mfr. Lathes.  
Porter, Mrs. Mary D.....Machinist.  
Shattuck, C. S.....Mfr. Fire Arms.

**HAVERHILL.****MACHINISTS.**

Adams, Chas. W.      Messer, Elbridge.  
 Bryant, F.          Nichols, H.  
 Bushfield, James.      Nutter, W.  
 Chase, Milton.      Plummer, Chas. M.  
 Davis, F. E.          Sanderson, Geo. W.  
 Eaton, Geo. F.      Sawyer, N. F.  
 Everson, E.          Sheldon, E.  
 Johnson, Wm.

**MISCELLANEOUS.**

Bullen, T. & Son.....Mfrs. Nails.  
 Clark & Dow.....Mfrs. Nails.  
 Cram, A. W.....Plumber  
 Duffee, Edward.....Gas Fitter.  
 Finney, Thos. F.....Plumber.  
 Gardner, C. M.....Mfr. Dies.  
 Hall, F. J.....Plumber.  
 Haverhill Iron Works.  
 Holmes, Geo. N.....Machinery.  
 Hughes, A. N.....Plumber.  
 Proctor, G. K.....Plumber.

**HAYDENVILLE.**

Hayden (The) Co.....Mfrs. Brass Goods

**HINGHAM.**

Hardy, C. H.....Mfr. Flat Irons.  
 Howard, Chas. & Co.....Mfrs. Iron Castings.

**HOLLISTON.**

Stetson & Talbot.....Mfrs. Nails.  
 Wilder, S. & Co.....Coppersmiths.

**HOLYOKE.**

Buttrick & Flanders.....Spindle Mfrs.  
 Carrington, H. C. & Co.....Plumbers & Gas Fitters.  
 Coghlan, D. F.....Boiler Maker.  
 Connor Bros.....Plumbers.  
 Dean Steam Pump Co.....Mfrs. Steam Pumps.  
 Graves & Kenney.....Brass Found-ers.  
 Harlow, L.....Millwright.  
 Hill, R. H.....Machinery.  
 Holyoke Machine Co.....Machinists.  
 Jolly, J. & W.....Machinists.  
 Keegan, T. F.....Steam & Gas Fitter.  
 Kennedy & Sullivan.....Plumbers.  
 Kilbride, T. F.....Plumber, Steam & Gas Fitter.  
 Lyman, S. T. & Son.....Plumbers.  
 Massachusetts Screw Co.....Mfrs. Screws.  
 Mullin, B. F.....Boiler Maker.  
 Munn & Baush.....Founders & Machinists.  
 Newton, D. H. & J. C.....Millwrights.  
 Pattee & Perkins.....Machinists.  
 Perkins, B. F.....Machinist.  
 Phelps & Tower.....Plumbers.  
 Riout, A. G. & Son.....Plumbers.  
 Seymour, Henry Cutlery Co.....Mfrs. Cutlery.  
 Shepardson & Lucy.....Plumbers.  
 Smith, John C.....Machinist.  
 Warner, C. O.....Mfr. Files.

**HOPEDALE.**

Draper, G. & Sons.....Machinists.  
 Dutter Temple Co.....Machinists.  
 Hopedale Machine Co.....Machinists.

**HOPKINTON.**

Brewer, A. G.....Machinist.  
 Buck, Moses L.....Plumber.  
 Spencer, J. S.....Machinist.  
 Thomas, R. E.....Machinist.

**HOUSATONIC.**

French, A. B.....Millwright.  
 Spencer, Thos. H.....Machinist.

**HUDSON.**

Dawes, F. S.....Mfr. Dies.  
 Knight, F. D.....Machinist.  
 Tower Bros.....Machinists.

**HUNTINGTON.**

Williams, W. P.....Mfr. Edge Tools.

**HYDE PARK.**

American Tool & Machine Co.  
 Brainard Milling Machine Co.  
 Robinson, John T. & Co.....Machinists.  
 Spring, Robinson & Co.....Machinists.

**INDIAN ORCHARD.**

Chapman Valve Mfg. Co.....Brass Founders.

**KINGSTON.**

Cobb & Drew.....Mfrs. Tacks.  
 Drew, C. & Co.....Mfrs. Augers.  
 Holmes, F. H.....Mfr. Anchors.  
 Kingston Co-operative Foundry Co.  
 Old Colony Rivet Co.....Mfrs. Rivets.  
 Reed, P. C.....Mfr. Tacks.  
 Soule, Herbert.....Mfr. Tacks.  
 Stetson, Kimball W.....Mfr. Tacks.  
 Washburn, M. P.....Shipsmith.

**LAKEVILLE.**

Haskins, C.....Mfr. Agt. Impts.

**LANESBOROUGH.**

Colley, John L.....Iron, &c.

**LAWRENCE.****MACHINISTS.**

Blood, Albert.      Stedman, Northrup &  
 Carter, Samuel.      Smith.  
 Hall, Thomas.      Stedman & Fuller.  
 Horne, J. H.      Strange, R. B.  
 Lawrence Flyer &      Watts, J. E.  
   Spindle Works.      Webber, S. S. & W.  
 Lawrence Machine      Webster & Dustin.  
   Works.      Williams & Wilson.  
 McKay Sewing Machine  
 Co.

**MISCELLANEOUS.**

Bartram, Joseph H.....Coppersmith.  
 Brown, C. S.....Plumber & Gas Fitter.  
 Bunker, A. S.....Plumber.  
 Butler File Co.....Mfrs. Files.  
 Byron, James.....Brass Founder.  
 Carter, Amos.....Millwright.  
 Cole, A. E.....Millwright.  
 Craig, W. H. & Co.....Mfrs. Steam Governors.  
 Cullington & Co.....Plumbers.  
 Davis, Edmund & Son.....Iron Founder.  
 Farnham Bros.....Mfrs. Files.  
 Fogg, James A.....Brass Founder.  
 Forbes, W. & Sons.....Plumbers.  
 Harris, E. N.....Millwright.  
 Horne, J. H.....Mfr. Paper Mill Machinery.  
 Joselyn, W. H.....Iron Founder.  
 Josselyn & Webster.....Iron Founders.  
 Lawrence Boiler Works.  
 Merrimac Iron Foundry.  
 Mitchell, B. F.....Plumber.  
 Richardson, N. F.....Plumber.  
 Rutter, W. F.....Gas Fitter.  
 Slater & Thompson.....Plumbers.  
 Smart, Geo. B. & Co.....Coppersmiths.  
 Treat, James A. & Co.....Iron and Steel.  
 Watts, J. E.....Brass Worker.

**LEE.**

Dowd, John.....Mfr. Paper Machine Knives.  
 Hull, J. B.....Founder & Machinist.  
 Lee Foundry & Machine Co.  
 McLaughlin, John & Co.....Machinists.  
 Smith, A. P.....Plumber.  
 Smith, C. W.....Gas Fitter.  
 Tanner, E. P.....Brass Founder.

**LEEDS.**

Northampton Emery Wheel Co.

**LEOMINSTER.**

Farmer Lathe, Drill & Tool Co.  
 Farnsworth, Jno. B.....Steam & Gas Fitter.  
 Gates, A. F.....Machinist.  
 Mather, John.....Machinist.  
 Parks & Carpenter.....Gas Fitters.  
 Stowell, J. A.....Machinist.

**LEVERETT.**

Pike, W. M. .... Machinist.

**LITTLETON.**

Kimball Bros. .... Mfrs. Road Scrapers.

**LOWELL.****MACHINISTS.**

Aldrich, W. .... Lowell Knitting  
Bradshaw, J. A. .... Machine Co.  
Brown, E. .... Lowell Machine Shop.  
Brown, James. .... McNamara, Thomas.  
Burch, J. .... Nourbourn, Alfred.  
Cady, Geo. L. .... Perkins, Francis S.  
Calvert, Frank. .... Phoenix Machine Co.  
Carey, W. W. .... Robinson, William.  
Clement, John C. .... Sawyer, H. Jr.  
Fifield, Geo. W. .... Sawyer, J. M.  
Grosvenor, Horace P. .... Stevens, Benjamin F.  
Hope, W. H. & Co. .... Turner, Joseph.  
Huntoon, G. W. .... Whitehead & Atherton  
Kitson Machine Co. .... Machine Co.  
Lawrence, Benjamin. .... Wright, A. L.

**PLUMBERS, STEAM AND GAS FITTERS.**

Ayers, E. C. .... Proctor, F. Wm.  
Barker, Horace R. .... Ryan, J.  
Costello, T. & Co. .... Walkden, Thomas.  
Garity, T. R. .... Wright, J. H.  
Gilchrist, John. .... Wilder, H. H. & Co.

**MISCELLANEOUS.**

American Bolt Co. .... Mfrs Bolts & Nuts.  
Ashworth, Sager & Co. .... Mfrs Files.  
Barry, Geo. W. .... Machinists' Supplies.  
Boutwell Bros. .... Iron & Steel.  
Brown, Ephraim. .... Mfr. Lathes.  
Clark, Jeremiah. .... Machinery.  
Coburn Shuttle Co. .... Mfrs. Shuttles.  
Cole & Nichols. .... Iron Founders.  
Cushings, D. & Co. .... Galvanized Iron Workers.  
Dobbins, Richard. .... Boiler Maker.  
Duckworth & Knowles. .... Mfrs' Files.  
Fielding, H. A. .... Machinists' Tools.  
Fitts, I. N. .... Millwright.  
Hallowell, Albert. .... Brass Founder.  
Haworth & Watson. .... Mfrs Copper Tube.  
Jacques John S. & Co. .... Mfrs Shuttles.  
Kiddie, Alex. .... Pattern Maker.  
Knowles, John A. Jr. .... Mfr Scales.  
Lovejoy, Daniel & Son. .... Mfrs. Machine Knives.  
Lowell Gun Co. .... Mfrs. Fire Arms.  
Lowell Steam Boiler & Steam Press Works.  
Lowell Tin & Iron Co.  
Mahoney, J. P. .... Machinery.  
Peirce, E. B. .... Machinery.  
Pevey Bros. .... Iron Founders.  
Rollins, D. B. & Co. .... Brass Founders.  
Scannell, B. & Co. .... Boiler Makers.  
Smith, S. C. .... Mfr Screws & Bolts.  
Spellman & Sexton. .... Mfrs Spindles.  
Stratton, J. .... Millwright.  
Swain Turbine Mfg. Co. .... Mfrs. Water Wheels.  
Union Iron Foundry Co.  
Wilson, D. H. & Co. .... Coppersmiths.

**LYNN.****MACHINISTS.**

Allen & Walmsley. .... Kelland, Geo.  
Breed, S. B. .... Kenney, B. M.  
Brenahan Bros. .... Kniveton, Gilbert,  
Brown, W. A. & Co. .... Knox, David.  
Carsley, Hiram. .... Lynn Buffing Machine  
Deacon, Samuel. .... Assn.  
Ellison, James. .... McMillan, Thos.  
Emerson, Geo. W. & Co. .... Marrah, Edward.  
Furbush James W. .... Patten & Davey.  
Gallagher M'fg. Co. .... Rollins & Glazier.  
Hart, Thos. F. .... Sewart, Alex.  
Holbrook, Amos. .... Swain Fuller & Co.  
Holmes, E., & Son. .... White, Samuel C.  
Howard, Eli D.

**LYNN—Continued.****PLUMBERS, STEAM AND GAS FITTERS.**

Blackmore, C. R. .... Kelly, E. G.  
Brown, Geo. H. & Co. .... Larrabee, W. J.  
Cushing, F. J. .... May, L. A. & Co.  
Evans, E. .... Pike, P. D.  
Flint, O. A. .... Russell, L. H.  
Gore, Chas. P. .... Russell, N. D.  
Heath, H. W. .... Smith & Pool.  
Hunt, John. .... Tucker, A. B.  
Kelly, A. J. .... Winn, P. H.

**MISCELLANEOUS.**

Co-operative Die Shop. .... Mfrs. Dies.  
Cross, D. E. .... Pattern Maker.  
Dunbar, Hobart & Whidden. .... Mfrs. Tacks.  
Farrar Tack and Nail Co.,  
Foster, Chas. G. .... Mfr. Machine Needles.  
Gardner, C. M. .... Mfr Dies.  
Gordon & Roney. .... Mfrs. Edge Tools.  
Leonard & Simmons. .... Mfrs. Tacks.  
Matthews, D. C. .... Machinery.  
Miller & Deacon. .... Mfrs. Dies.  
Mosher & McDonnell. .... Mfrs. Dies.  
Murkland, R. L. .... Iron Founder.  
Murphy & Chapman. .... Die Cutters.  
Noble Stove Co. .... Stove Founders.  
Otis, G. W. .... Iron Castings.  
Phillips, O. .... Mfr. Machine Needles.  
Simmons, S. E. .... Mfr. Tacks.  
Taylor, Joseph M. .... Millwright.  
Teel, E. S. .... Mfr. Edge Irons.  
Waterhouse, W. W. .... Mfr. Dies.  
Whitten & Lascell. .... Mfrs. Machine Needles.

**MALDEN.**

Cook, Adam. .... Plumber.  
Henderson, W. A. .... Plumber.  
Oliver, S. F. .... Gas Fitter.  
Russell, John T. .... Machinist.

**MANSFIELD.**

Beeden, James. .... Mfr. Dies, &c.  
Birkenhead, John. .... Mfr. Spindles.  
Carl, S. W. & Co. .... Mfrs. Dies, Taps, &c.  
Central Iron Foundry Co.,  
Chilson, Gardner. .... Stove Founder.  
George, M. .... Mfr. Edge Tools.  
Mansfield Tool Co.  
Murphy, John. .... Mfr. Shears.  
Rider, J. E. .... Iron Founder.  
Robinson, G. A., & Co. .... Mfrs. Knives.  
Whitmore, N. G. .... Mfr. Rifles.

**MAPLEWOOD.**

Powers, John A. .... Plumber.

**MARBLEHEAD.**

Brown, J. T. .... Machinist.  
Maine, Thomas, Jr. .... Plumber and Gas Fitter.

**MARLBOROUGH.**

Bevan, A. G. .... Iron Pipe, &c.  
Bevan, W. B. .... Machinist.  
Bradley & Brigham. .... Machinists.  
Carter & Wheeler. .... Machinists.  
Davey & Exley. .... Machinist.  
Hobbs, G., Jr. .... Mfr. Dies, &c.  
O'Grady, Charles. .... Gas Fitter.  
Parsons, Henry. .... Machinist

**MATTAPOISETT.**

Bumpus, George T. .... Sheet Iron Worker.  
Dexter, A. M. .... Machinist.

**MEDFIELD.**

Sanborn & Moody. .... Mfrs. Paper Mill Knives.  
Spinney, F. J. .... Plumber.

**MEDFORD.**

Carr & Page. .... Plumbers.  
Small, J. D. .... Plumber.

**MEDWAY.**

Adams, E. A. & Co. .... Machinists.  
Holbrook & Son. .... Bell Founders.  
New England Awl and Needle Co.  
Thayer, A. P. .... Machinist.  
Ware, A. L. & M. A. .... Mfrs. Organ Pipes.

**MELROSE.**

Holbrook & Hunt..... Plumbers.  
Howes, J. C..... Plumber.

**MIDDLEBOROUGH.**

Jenks, E. T..... Machinist.  
Le Barron, J. B..... Iron Founder.  
Union Needle Co..... Mfrs. Needles.

**MILFORD.**

Buxton, J. L..... Machinist.  
Estabrook, Wires & Co..... Mfrs. Clinching Screws.  
Irons & Hoyt..... Plumbers.  
Jeffers, S..... Machinist.  
Kimball, J. E..... Machinist.  
Lilley & Co..... Mfrs. Machine Needles.  
Littlefield, J. W..... Machinist.  
Tonkas, L. T..... Mfr. Dies.  
Willard, Henry..... Machinist.

**MILLBURY.**

Buck Bros..... Mfrs. Edge Tools.  
Buck, Charles..... Mfr. Edge Tools.  
Martin, John..... Iron Founder.  
Millbury Machine Co..... Machinists.

**MILLER'S FALLS.**

Langdon Mitre Box Co..... Mfrs. Mitre Boxes and  
Scroll Saws.  
Lester & Lyman Mfg. Co..... Mfrs. Hardware.  
Miller's Falls Co..... Mfrs. Hardware.

**MILLVILLE.**

Smith, T. T..... Machinist.

**MONSON.**

Calkins, D. A..... Machinist.  
Wetherell, H. P..... Plumber.

**MONTAGUE.**

Rugg, Amos..... Mfr. Agl. Impls.

**NAHANT.**

Mav, L. A. & Co..... Plumbers.  
Winn, P. H..... Plumber.

**NANTUCKET.**

Folger, E. R..... Gas Fitter.

**NATICK.**

Franklin, George..... Machinist.  
Hoisington, W. D..... Plumber.  
Inman Bros..... Machinists.  
Jennings, J..... Mfr. Edge Tools.

**NEEDHAM.**

Freeman, W. C..... Machinist.  
Jones, George E..... Machinist.  
Orr, Galen & Co..... Mfrs. Hardware.

**NEW BEDFORD.**

Acushnet Iron Co..... Iron Founders.  
Allen, Geo. C..... Plumber.  
Babbitt, Wood & Co..... Boiler Makers.  
Barton, James..... Shipsmith.  
Bowker & Tripp..... Machinists.  
Collins & Bowie..... Millwrights.  
Cooper, Geo..... Mfr. Knitting Needles.  
Craigie, Andrew..... Brass Founder.  
Dean, H. N..... Shipsmith.  
Driggs, James D..... Shipsmith.  
Dunfee, James..... Shipsmith.  
Gifford & Allen..... Brass Founders.  
Gifford, Thomas J. & Co..... Steam & Gas Fitters.  
Gosnell Mills..... Rolling Mills.  
Grinnell, Edmund..... Iron Founder.  
Hathaway, B. D..... Mfr. Edge Tools.  
Hayden & Crossman..... Gas Fitters.  
Hayes, N. P..... Mfr. Agl. Impls.  
Jenney, P. P..... Machinist.  
Knox, Andrew..... Plumber.  
Lewis & Bradley..... Boiler Makers.  
London Needle Co..... Mfrs. Needles.  
Macey, E. B. & F..... Shipsmiths.  
Morse Twist Drill & Machine Co.  
New Bedford Boiler Co..... Boiler Makers.  
New Bedford Copper Co.  
New Bedford Foundry Co.  
New Bedford Machine Shop.

**NEW BEDFORD—Continued.**

Price, Alexander..... Mfrs. Files.  
Ryan Bros..... Plumbers.  
Ryder & Vaughn..... Machinists.  
Sawyer, John A..... Shipsmith.  
Sherman, J. C..... Plumber & Gas Fitter.  
Snow, James M..... Shipsmith.  
Tobey & Coggeshall..... Plumbers.  
Union Boiler Works.  
Watkins & Handy..... Iron, etc.  
White, P..... Plumber.  
Wood, Brightman & Co..... Gas Fitters.

**NEWBURYPORT.**

Adams, Joseph C..... Shipsmith.  
Davis, E. E..... Machinist.  
De Rochemont, C. H..... Brass Founder.  
Kennison, J..... Shipsmith.  
Newburyport Iron Foundry.  
Newburyport Tool & Machine Co.  
Russell, Albert S. & Sons. Founders & Machinists.  
Sargent, Chas. R..... Gas Fitters, etc.  
Stanley, J. C..... Iron & Steel.  
True, John A..... Machinist.

**NEWTON.**

Beck, Adam..... Mfr. Paper Machinery.  
Carrier, S. F..... Plumber.  
Clark, Geo. P..... Gas Fitter.  
Gooch, A. M..... Mfr. Bicycles.  
Hatch, L. N..... Plumber.  
Pettie Machine Co..... Machinists.  
Pike, Edward..... Plumber.  
Smith, H. W..... Plumber.  
Snow, A. W..... Plumber.  
Sylvester, A..... Machinist.

**NEWTON CENTRE.**

Neil, W. B..... Plumber.

**NEWTON HIGHLANDS.**

Crane, M. G..... Machinist.

**NEWTON UPPER FALLS.**

Pettie, O. & Co..... Machinists.

**NORTH ADAMS.**

Blake, F. N..... Plumber.  
Hodge, O. J..... Machinist.  
Holbrook, M. G..... Plumber.  
Hunter, A. W..... Plumber & Gas Fitter.  
Hunter, James & Son..... Founders & Machinists.  
Phillips, Jerome..... Millwright.  
Tyrrell, James..... Boiler Maker.  
Woodward, L. W..... Millwright.

**NORTHAMPTON.**

Clapp, C. C..... Iron Founder.  
Clement Mfg. Co..... Mfrs. Cutlery.  
Couch, B. M..... Machinist.  
Crystal Emery Wheel Co.  
Day, W. H..... Plumber.  
Eames & Sprague..... Plumbers.  
Florence Machine Co..... Machinists.  
Florence, Tack Co..... Mfrs. Tacks.  
Goodwin, W. C. & A. F..... Machinists.  
Herrick, Webster..... Machinist.  
Hussey, N. B. & Co..... Plumbers.  
Knapp, Dovetailing Machine Co.  
Lee & Day..... Plumbers.  
Maynard, C. A..... Mfr. Cutlery & Tools.  
Northampton Cutlery Co..... Mfrs. Cutlery.  
Shannon, James H..... Machinist.

**NORTH ANDOVER.**

Davis & Furber..... Machinists.

**NORTH ATTLEBOROUGH.**

Bosworth, J. I..... Machinist.  
Platt, N. N..... Steam & Gas Fitter.  
Union Steam & Gas Pipe Co.  
Wilcox & Barnett..... Machinists.

**NORTHBORO.**

Howe, E. P..... Mfr. Lathes.

**NORTHBRIDGE.**

Whitin Machine Works.... Mfrs. Cotton Machin'y.

**NORTH BROOKFIELD.**

Bliss, L. E. .... Machinist.

**NORTH CAMBRIDGE.**Cutler, J. H. & Co. .... Mfrs. Ice Tools.  
Hanna, W. J. .... Plumber.**NORTH CARVER.**

Cole, H. C. &amp; W. S. .... Mfrs. Tacks.

**NORTH CHELMSFORD.**Chelmsford Foundry Co. ....  
Silver & Gay. .... Machinists.**NORTH DIGHTON.**

Briggs, Albert. .... Mfr. Hammers.

**NORTHFIELD.**

Ross &amp; Co. .... Mfrs. Ag'tural Impl.

**NORTH SANDWICH.**Holloway, Seth W. .... Mfr. Edge Tools.  
Howard, E. C. .... Mfr. Stove Castings.**NORTH SCITUATE.**

Bailey, Chas. E. .... Machinist.

**NORTON.**

Crocker Bros. &amp; Co. .... Mfrs. Copper.

**NORWOOD.**

Draper, E. D. &amp; Co. .... Iron Founders.

**OAKHAM.**

Field, S. .... Machinist.

**ORANGE.**Chase Turbine Mfg. Co. .... Mfrs. Water Wheels.  
Hunt & Rodney Machine Co., Mfrs. Turbine Water  
Wheels.  
New Home Sewing Machine Co.  
Orange Iron Foundry Co.**OTIS.**

Brogia &amp; Co. .... Mfrs. Agri. Impts.

**OTTER RIVER.**Lord & Stone. .... Stove Founders.  
Nichols, W. E. .... Machinist.  
Wheeler, J. B. .... Millwright**OXFORD.**

Johnson, A. E. .... Mfr. Edge Tools.

**PALMER.**Edgerton & Davis. .... Iron Founders.  
Robinson, Geo. .... Iron and Steel.**PEABODY.**Caskins, D. A. & F. H. .... Plumbers.  
Cate, Wm. .... Millwright.  
Clement, John E. & Co. .... Machinists.  
Dennison, Isaac. .... Millwright.  
Friend & Annable. .... Millwrights.  
Jones, A. W. .... Mfr. Edge Tools.  
Little, G. H. .... Mfr. Steam Injectors.  
Lord, D. B. .... Plumber.  
Peabody Machine Shop.  
Rollins, John B. .... Machinist.  
Wilson, Thos. E. .... Machinist.**PELHAM.**

Shepard, G. W. .... Mfr. Agl. Imp'ts.

**PEPERELL.**Blake Bros. .... Machinists.  
Burkinstuaw, A. .... Mfr. Cutlery.**PITTSFIELD.**Backus, W. G. & Sons. .... Plumbers.  
Bagg, Martin. .... Plumber.  
Feeley, John. .... Plumber.  
Jones, E. G. .... Millwright.  
Loynes, L. H. .... Iron Founder.  
May & Chappel. .... Machinists.  
Pittsfield Tack Co. .... Mfrs. Tacks.  
Powers, Henry. .... Machinist.  
Robbins, Gamwell & Co. .... Steam and Gas Fittings.**PITTSFIELD—Continued.**Russell, H. S. .... Boiler Mkr.  
Wakefield, Chas. A. .... Mfr. Agl. Impts.  
Wrought Iron Tubular Heater Co.**PLYMOUTH.**Bradford Joint Company. .... Mfrs. Boring Mach'ns.  
Cobb & Drew. .... Mfrs. Rivets, Tacks, etc.  
Edes, Oliver. .... Mfr. Zinc.  
Harlow & Bailey. .... Gas Fitters.  
Harris, Christopher T. .... Gas Fitter.  
Hart, Lucius & Co. .... Mfrs. Zinc.  
Kingston Co-operative Foundry Co.  
Loring, Samuel. .... Mfr. Tacks and Rivets.  
Mauter & Blackmer. .... Mfrs. Hammers.  
Morton, E. S. .... Mfr. Hammers.  
Plymouth Foundry Co. .... Stove Founders.  
Plymouth Hammer Works.  
Plymouth Mills. .... Mfrs. Rivets.  
Reed Bros. .... Rolling Mills.  
Rinley & Bartlett. .... Mfrs. Tacks.  
Robinson Iron Co. .... Mfrs. Nails, &c.  
Wood, Nathaniel & Co. .... Mfrs. Nails, &c.**PLYMPTON.**

Harrub, F. M. .... Mfr. Tacks.

**PRINCETON.**

Bedard Bros. .... Mfrs. Machine Screws.

**PROVINCETOWN.**Crocker, P. .... Shipsmith.  
Herbert, W. H. .... Shipsmith.  
Livermore, J. H. .... Shipsmith.  
Small, I. A. .... Shipsmith.  
Taylor, A. .... Shipsmith.**QUINCY.**Badger Bros. .... Machinists.  
Citizens' Gas Light Co. .... Gas Fitters.  
Gavin, P. H. .... Plumber.  
Lacy, P. F. .... Machinist.  
Packard, A. .... Iron Founder.  
Perry, F. J. .... Plumber & Gas Fitter.  
Whittemore, David. .... Machinist.  
Wollaston Foundry Co.**RAYNHAM.**Gardiner, Chas. B. .... Mfr. Nails.  
King, Geo. W. .... Mfr. Nails.  
Leeds, Robinson & Co. .... Mfrs. Tacks.**REHOBOTH.**

King, W. A. .... Machinist.

**ROCHDALE.**

Hankey, A. &amp; Co. .... Mfrs. Machine Knives.

**ROCKLAND.**Smith, Jason. .... Machinist.  
Stetson, Chas. T. .... Machinist.**ROCKPORT.**

Smith &amp; Poole. .... Plumbers.

**SALEM.****MACHINISTS.**Curwen, Chas. F. .... Patten, Paul B.  
Gifford, T. J. & Sons. .... Philbrick, A. J. & Co.  
Glazier, Geo. W. .... Salem Foundry and Ma-  
Goodell, Z. & Co. .... chine Co.  
Hodskinson, J. .... Smith, Jno. R. & Son.  
Martin, W. P. .... Smith, Sterry & Co.  
Newcomb, Geo. .... Weston, John W.**PLUMBERS, STEAM AND GAS FITTERS.**Chambers, John H. .... Norton, Geo.  
Cheever, Joseph C. .... Phippen, Chas. H.  
Goss, Francis P. .... Staten, C. A.  
Hart, W. H. .... Stevens, S. A.  
Lord, D. B., Jr. .... Waters, A. S., Jr.  
McLaughlin, J. C. .... Wendell, F. A.  
Millea, Lawrence E.**MISCELLANEOUS.**Curwen, Chas. F. .... Iron Founder.  
Fairfield, S. W. .... Millwright  
Forest River Lead Co.  
Freund, F. M. .... Mfr. Saws.  
Grant, Joshua B. .... Mfr. Edge Tools.



**SALEM—Continued.**

Locke Bros.....Mfrs. Steam Governors.  
 McDonald & O'Brien.....Boiler Makers.  
 Phillips, J. L. & Co.....Mfrs. Files.  
 Salem Boiler Works.  
 Salem Foundry & Machine Co.  
 Salem Lead Co.  
 Smith, Jno. R. & Son.....Iron Founders.  
 Smith & Smart.....Brass Founders.  
 Waters, Andrew S.....Coppersmiths.

**SALISBURY.**

Day, W. H.....Mfr. Files.

**SANDWICH.**

Burgess, Howland & Co.....Mfrs. Tacks.  
 Holway, Seth W.....Mfr. Axes.  
 Howard, E. C.....Machinery Castings.  
 Jones, Heald & Co.....Mfrs. Tacks.  
 Sandwich Tack Co.....Mfrs. Tacks.

**SAVOY.**

Reed, William.....Mfr. Edge Tools.

**SAXONVILLE.**

Kirby, J. W.....Plumber.

**SHARON.**

Lothrop, H. A., & Co.....Mfrs. Cutlery.

**SHATTUCKVILLE.**

Smith, Milo C.....Iron Founder.

**SHELburne FALLS.**

Fife, L. S.....Mfr. Water Wheels.  
 Gardner Mfg. Co.....Mfrs. Cutlery.  
 Lamson & Goodnow Mfg. Co.....Mfrs. Cutlery.  
 Mayhew, H. H., & Co.....Mfrs. Bits.

**SOMERSET.**

Mount Hope Iron Co.....Mfrs. Nails.  
 Somerset Co-operative Foundry Co.

**SOMERVILLE.**

Duncan, William.....Brass Founder.  
 Howe & Flint.....Plumbers.  
 Le Gallie, Charles A.....Plumber.  
 McDonald, Joseph.....Plumber.  
 Merritt, H. W.....Machinist.  
 Snow, W. L.....Plumber.  
 Sullivan, C.....Plumber and Gas Fitter.  
 Sylvester & Co.....Mfrs. Spikes.

**SOUTH ABINGTON.**

Atwood Bros.....Machinists.  
 Dunbar, Robert & Whidden.....Mfrs. Nails & Tacks.  
 Gurnee, David B.....Mfr. Tacks.  
 Old Colony Rivet Co.

**SOUTH BELLINGHAM.**

Wilcox, D. E.....Mfr. Agrl. Impls.

**SOUTHBOROUGH.**

Newton, L. W.....Plumber.

**SOUTHBRIDGE.**

Harrington, D.....Mfr. Knives.  
 Harrington, Theodore.....Mfr. Knives.  
 Herron, Robert.....Machinist.  
 Hyde Mfg. Co.....Mfrs. Knives.  
 Litchfield Shuttles Co.  
 Richards, Stephen.....Mfr. Edge Tools.

**SOUTH CARVER.**

Ellis Foundry Co.  
 Murdock Parlor Grate Co.....Founders.

**SOUTH EASTON.**

Dean, T. H. & J. O.....Machinists.

**SOUTH FRAMINGHAM.**

Kirby, J. W.....Plumber.  
 Wise, Thomas.....Machinist.

**SOUTH FRANKLIN.**

Clark, J. W.....Machinist.

**SOUTH GARDNER.**

Ellsworth, George F.....Mfr. Tools.  
 Potter, Bennett.....Millwright.

**SOUTH HADLEY.**

Harris, W. F.....Machinist.

**SOUTH HANOVER.**

Phillips, E., & Sons.....Machinists.  
 Waterman, L. C., & Sons.....Mfrs. Nails.

**SOUTH HINGHAM.**

Jacob's, Joseph, Sons.....Mfrs. Hatchets.  
 Jones, Thomas, & Sons.....Shipsmiths.

**SOUTH LANCASTER.**

Eager, Rufus.....Mfr. Copper Pumps.

**SOUTH SCITUATE.**

Briggs, E. B., & Co.....Mfrs. Tacks.  
 Merritt, Charles H.....Mfr. Edge Tools.  
 Merritt, James.....Mfr. Edge Tools.

**SOUTH SUDBURY.**

Munson, S. H.....Massachusetts Central R. R.

**SOUTH WEYMOUTH.**

Merritt, C. L.....Mfr. Tacks.

**SOUTHWICK.**

Wood, George.....Mfr. Agl. Impls.

**SPENCER.**

Wright, George C.....Machinist.

**SPRINGFIELD.****MACHINISTS.**

Dole, J. L.	Piper, E. J.
Duckworth, James.	Richards, F. H.
Ellison, Francis.	Roche, John.
Ford, H.	Russell & Day.
Gilbert & Barker Mfg Co.	Stacey, E. S.
Markham, W. H. & Co.	Thompson, W. H.
Moore, Wm., Jr.	

**PLUMBERS, STEAM AND GAS FITTERS.**

Beebe, N. S.	Lamb, H.
Carr, F. R.	Lynch, J. A.
Casey, D. D.	Moore, Geo. B.
Elwell, E. M.	Mowry, C. L. & Co.
Flske, W. L.	Phillips, Geo. S.
Fox, L. O.	Phillips Mfg. Co.
Gifford, A. M. & Co.	Rice, Chas. B.
Handyside & Jarrett.	Small, W. F.
Kennedy, J. W.	Stanton, S. E.
Knight, A. M. & Son.	Tower, F. W.

**MISCELLANEOUS.**

Atwood Safety Nut Co.....Mfrs. Nuts.  
 Barney, E. H.....Mfr. Skates.  
 Bemis Car Box Co.  
 Bemis & Call.....Mfrs. Tools & Hardware.  
 Chamberlain Mfg. Co.....Mfrs. Gas & Steam Fixtures.  
 Connor, C. S.....Mfr. Hardware.  
 Davis Level & Tool Co.  
 Dickinson, E. L.....Mfr. Fire Arms.  
 Dwight & Hoyt.....Mfrs. Corrugated Iron.  
 Ellison, Francis.....Machinery.  
 Emory, P. P. & Co.....Brass Founders.  
 Engelhardt, F. & Co.....Coppersmiths.  
 Farmer & Gardner Mfg. Co.....Mfrs. Sewing Machines.  
 Foot, Homer & Co.....Iron & Steel.  
 Goodhue & Birnie.....Mfrs. Iron Pipe.  
 Hall, G. F.....Engine Builder.  
 Hawkins, R. F.....Iron Founder & Boiler Maker.  
 Hill, B. B. Mfg. Co.....Mfrs. Cancelling Stamps.  
 Howard, Bros.....Railroad Supplies.  
 Kingsbury, Geo. O.....Mfr. Knives.  
 Kunz, Alonzo.....Brass Founder.  
 Labarre, John N.....Mfr. Nuts.  
 Mathewson, J. E.....Mfr. Steel Stamps.  
 Morgan, Henry.....Brass Worker.  
 National Needle Co.....Mfrs. Needles.  
 O'Connell, P. J., & Son.....Coppersmiths.  
 Page Wrought Iron Car Wheel Co.....Mfr. Tools.  
 Potven, H.....Mfr. Tools.  
 Seeger, Mfg. Co.....Mfrs. Cast Iron Jack Screws.

**SPRINGFIELD—Continued.**

Smith & Wesson.....Mfrs. Fire Arms.  
 Springfield Foundry Co.  
 Springfield Glue & Emery Wheel Co.  
 Springfield Sewing Machine Co.  
 Springfield Shuttle Co.  
 Stearns, W. H.....Connecticut River R. R.  
 Stebbins, E. Mfg. Co.....Brass Founders.  
 Talcott, N. W.....Mfr. Car Axles.  
 Trask, E.....Iron Founder.  
 Wason Mfg. Co.....Mfrs. Railroad Cars.  
 Wilcox, W. L. & Co.....Steel & Iron Works.  
 Wright & Emerson.....Iron Founders.

**STERLING.**

Copeland, Frank.....Machinist.

**STOCKBRIDGE.**

Burghardt, Frederick.....Machinist  
 Burghardt, John H. & Co.....Iron Founders.

**STONEHAM.**

Marston, O. H.....Machinist.  
 Osgood, Geo. A.....Die Cutter.  
 Paige, John C.....Machinist.  
 Theobald, Joseph.....Plumber.

**STOUGHTON.**

Britton, Joshua & Son.....Mfrs. Awls.  
 Southworth, L. & G.....Mfrs. Screws.

**STURBRIDGE.**

Ladd, N. D. & Son.....Mfrs. Edge Tools.  
 Snell Mfg. Co.....Mfrs. Bits & Augers.

**SUDBURY.**

Howe, Joseph C. & Co.....Mfrs. Tacks.  
 Hurlburt, Rufus H.....Machinist.

**SUTTON.**

Dudley, D. T. & Son.....Mfrs. Shuttles.  
 Marble, E. S. & Co.....Mfrs. Shuttles.  
 Newton & Chase.....Machinists.

**SWIFT RIVER.**

Alcott, Wm.....Mfr. Files.

**TAUNTON.**

Anthony & Cushman.....Mfrs. Tacks.  
 Babbitt, F. S.....Machinist.  
 Bannon, James.....Mfr. Files.  
 Caswell, Conner, & Co.....Mfrs. Tacks.  
 Central Mfg. Co.....Mfrs. Tacks.  
 Champion Stove Foundry Co.,  
 Chick, Peter.....Plumber.  
 Coleman & Chase.....Machinists.  
 Cooper, L. W.....Gas Fitter.  
 Cox & Wardell.....Plumbers.  
 Crocker Bros., & Co.....Mfrs. Copper.  
 Cushman, H. L.....Mfr. Tacks.  
 Cuzner, James S.....Plumber.  
 Field, Albert, Tack Co.,.....Mfrs. Tacks.  
 Hewins, P. W.....Plumbers' Supplies.  
 Holden, John.....Plumber.  
 Homer, W.....Iron Founder.  
 Lee, Samuel.....Machinist.  
 Leonard Co-operative Foundry Co.  
 McMahon, Hugh.....Plumber.  
 McMahon, J. E.....Plumber.  
 Maher, James T.....Coppersmith.  
 Macon Machine Works.....Locomotive Bldrs.  
 Mathison, J. D.....Plumber.  
 Old Colony Iron Co.....Mfrs. Nails.  
 Potter, W. R.....Machinist.  
 Rounds, L. A.....Mfr. Tacks.  
 Sparta Tack Co.....Mfrs. Tacks.  
 Strange Cylinder Saw & Machine Co.  
 Taunton Copper Mfg. Co.  
 Taunton Gas Light Co.....Gas Fitters.  
 Taunton Iron Works Co.....Iron Founders.  
 Taunton Locomotive Mfg. Co.  
 Taunton Stove Co.....Stove Founders.  
 Taunton Tack Co.....Mfrs. Tacks.  
 Thomas, O. G.....Iron Founder.  
 Tr-fethen, Daniel A.....Brass Founder.  
 Union Furnace Co.....Stove Founders.  
 Webster, Joseph.....Mfr. Files.  
 Weir Stove Co.....Stove Founders.

**TAUNTON—Continued.**

Williams & Godfrey.....Machinists.  
 Williams, H. A., & Co.....Mfrs. Tacks.  
 Woodward, W. F.....Coppersmith.  
 Wright, Joseph.....Stove Founder.

**TEMPLETON.**

Lord & Stone.....Stove Founders.  
 Nichols, W. E.....Machinist.  
 Wilkinson, John F.....Machinist.

**TEWKESBURY.**

Phoenix Machine Works.....Machinists.

**TURNERS FALLS.**

Clark & Heald Machine Co.....Machinists.  
 Jamieson, John.....Machinist.  
 Manchester & Ward.....Plumbers & Steam Fitters.  
 Russell, John, Cutlery Co.....Mfrs. Cutlery.  
 Starbuck, R. M. & Co.....Plumbers.

**TYRINGHAM.**

Breckenridge, J. L.....Mfr. Ag'l. Impts.  
 Garfield, J. M. & Son.....Mfrs. Ag'l. Impts.  
 Steadman, M. V. B.....Mfr. Ag'l. Impts.

**UPTON.**

Hedges, James.....Machinist.

**UXBRIDGE.**

Leach, W. H.....Machinist.

**WAKEFIELD.**

Richardson, S. O.....Mfr. Shuttles.  
 Smith & Anthony Stove Co.....Stove Founders.  
 Woodward, J. M. & Son.....Mfrs. Tools.

**WALES.**

Shaw, W.....Machinist.  
 Shepardson, D. Jr.....Machinist.

**WALPOLE.**

Linden Spring Co.....Mfrs. Springs.

**WALTHAM.**

Brown, R. G., & Co.....Iron and Brass Founders.  
 Davis & Farnum Mfg. Co.,.....Machinists.  
 Hall, Chas. Jr.....Plumber.  
 Hobbs, Geo. E.....Machinist.  
 Knapp, Geo. H.....Plumber.  
 Nutting & Co.....Machinists.  
 Ryan, Edward A.....Plumber.  
 Shedd, Geo. F.....Machinist.  
 Sibley, N. L.....Machinist.  
 Stark, J.....Machinist.  
 Stearns, Watson.....Plumber & Gas Fitter.  
 Toffatter, C. H.....Steam & Gas Fitter.  
 Waltham Watch Tool Co.

**WARE.**

Corser, Samuel A.....Iron Founder.  
 Prescott Gun Co.....Mfrs. Fire Arms.

**WAREHAM.**

Carr, Francis.....Iron Founder.  
 Humphrey, Albert.....Iron Works.  
 Tremont Nail Co.....Mfrs. Nails.  
 Wareham Nail Co.....Mfrs. Nails.  
 Warr, James C.....Mfr. Malleable Iron.

**WARREN.**

Knowles Steam Pump Works.

**WATERTON.**

Carrier, S. F.....Plumber.  
 Porter Needle Co.....Mfrs. Needles.  
 Walker & Pratt Mfg. Co.....Stove Founders.

**WAYLAND.**

Harris, J. H.....Plumber.

**WEBSTER.**

Colvin, Joseph.....Iron Founder.  
 Haven, John A.....Machinist.

**WELLESLEY.**

Porter, F. H.....Plumber.

**WESTBORO.**

Burke, R. F.....Plumber.

**WEST BOYLESTON.**

Murdock, David C.....Machinist.

**WEST BRIDGEWATER.**

Alger, James O.....Iron Founder.  
Bent, G. W.....Iron Founder.  
Shipman, Geo.....Machinist.  
Turner, Wm.....Machinist.

**WEST CHELMSFORD.**

Hiscox File Mfg. Co.

**WESTFIELD.**

Dean, Allen.....Millwright.  
Diehl, C. H.....Plumber.  
Fox, James H.....Machinist.  
Lafin Mfg. Co.....Iron Founders.  
Lounsbury, J. H.....Machinist.  
Smith (The) H. B. Co.....Mfrs. Steam Heating Apparatus.  
Sprague, H. O. & Son.....Plumbers.  
Tyler, N. F.....Machinist.  
Wheeler, Frank L.....Machinist.

**WESTFORD.**

Sargent's, Chas. G. & Sons.....Machinists.

**WEST MEDFORD.**

Spinney, F. T.....Plumber.

**WEST NEWTON.**

French, Wm.....Plumber.  
Friske, A. J. & Co.....Plumbers.  
Humphreys, F. H.....Number.

**WESTON.**

Bowen, Henry D.....Machinist.  
Sibley, N. L.....Machinist.

**WEST SANDWICH.**

Keith Car Manufacturing Co.

**WEST STOCKBRIDGE.**

Hudson Iron Co.  
Richmond Iron Works.  
Spencer, John S.....Machinist.

**WEST WARREN.**

Crossman, A. W. & Son.....Mfrs. Edge Tools.

**WEYMOUTH.**

Weymouth Iron Co.....Rolling Mill.

**WHATELY.**

Fox, S. W.....Machinist.

**WILLIAMSBURG.**

Foster, James M.....Machinist.  
Hayden, (The) Brass Works.  
Lawley, F. & Son.....Mfrs. Files.  
Luce, E. H.....Machinist.

**WINCHENDON.**

Backus, Q. S.....Mfr. Bits.  
Goodspeed, Geo. N.....Machinist.  
Peasley, A. M.....Plumber.  
Piper, D. B.....Machinist.  
Streeter, A.....Machinist.  
Whitney, B. D.....Machinist.

**WINCHESTER.**

Brodeur, J. F. & Co.....Plumbers.  
Curtin & Dwyer.....Plumbers.  
Porter, Chas.....Mfr. Knives.  
Whitney, Joel.....Machinist.

**WINDSOR.**

Jordan, G. J.....Machinist.

**WOBURN.**

Anthony, Benj.....Machinist.  
Bowers, Geo. P.....Iron Founder.  
Buell, Jas.....Machinist.  
Buell & Flint.....Plumbers.  
Clemson & Co.....Mfrs. Saws.  
Fowle Bros.....Mfrs. Band Saws.  
Freeman, J. F. & Co.....Machinists.  
Hartley, T. J.....Plumber.  
Healey, Geo.....Mfr. Saws.

**WOBURN—Continued.**

Healey, Fowler & Co.....Mfrs. Saws.  
Jenkins, Nathaniel.....Plumber.  
Parks & Freeman.....Machinists.  
Simonds, N. J.....Machinist.  
Tidd, Marshall.....Mfr. Carriers' Tools.  
Wheeler, Jno. S.....Mfr. Tools.  
Wood, W. & Co.....Steam and Gas Fitters.  
Young, H., Jr.....Machinist.

**WOLLASTON.**

Perry, Frank J.....Plumber & Gas Fitter.  
Wollaston Foundry Co.

**WORCESTER.**

**MACHINISTS.**

Adams, Jno. Jr. Matthews, Isaac D.  
Bancroft & Smith. Nelson, S. W. & Co.  
Blaisdell, P., & Co. Pease, H. C. & Co.  
Blake Bros. Perkins, John S.  
Boynton & Plummer. Pollard, Leonard L.  
Brown, W. H. Pond, David W.,  
Brownell Geo. L. Tools.  
Burlingame, A. & S. F. Powell, A. M. & Co.,  
Carrol Machine and Tools.  
Spindle Works. Prentice, Bros.,  
Cleveland Mch'n W'ks, Tools.  
Woolen Mch'n'y. Rathbun & Willson.  
Compton, Geo. Looms. Reed, F. E.  
Copeland & Chamberlain. Revere, N. L.  
Curtis & Marble. Rice, Barton & Fales  
Woolen Machinery. Machine & Iron Co.  
Earle & Davis. Richardson, Horace A.,  
Eddy, W. H. Wood Working.  
Fairbanks, Geo. L. Rowe, Geo.  
Farnsworth, A. A. Roy, B. S.  
Fish, Henry C. & Co. Sawyer, Joseph A. &  
Fisher, E. & Co. Son.  
Fuller, J. A. & Co. Smith, Thos. & Co.  
Tools. Stowe, A. F.  
Gem Emery Wheel & Taft, Geo. C., Tools.  
Machine Co. Taft, T. F.  
Gilbert Loom Co. Thompson, H. & Co.,  
Gooding, John. Wood Working.  
Harthan, S. E. Warren, W. H.  
Harwood & Quincy Webster, C. C.  
Machine Co. Wheeler, J. S. & Co.  
Hastings, T. J. & Co. Wheelock Steam Engine  
Hodgkins, D. Works.  
Johnson & Bassett. Whitcomb Mfg. Co.  
Kent, S. W. Wickersham, Wm.  
Knowles, L. J. & Bro. Winslow, Samuel.  
Lath & Morse Tool Co. Witherby, Rugg &  
Lee, H. A. Richardson,  
Lombard, N. A. & Co. Wood Working.  
McDonald, Alex. Wood, E. H.  
McIver Bros. & Co., Wood, Jennison & Co.  
Wood Working. Worcester Machine  
Machinery. Screw Co.  
McMahon & Carver, Wright Machine Co.  
Tools.

**PLUMBERS, STEAM AND GASFITTERS.**

Baldwin, Chas. H. Moody, E. A.  
Cahill, J. F. Phelan, John J.  
Colvin, M. R. Reed, C. C.  
Downey, J. H. Reed & Ballou.  
Green & Gough. Sarvin, H. H. & Son.  
Hagen, P. J. Sisson, J. D.  
Hair Bros. Sutton, Geo. T.  
Hammond, E. H. Tucker, N. G. & Son.  
Maynard, W. G.

**MISCELLANEOUS.**

Adams, N. A. & Co.....Mfrs. Files.  
Allen, Wm. & Sons.....Boiler Makers.  
American Awl Co.....Mfrs. Awls.  
Ames Plow Co.....Mfrs. Plows.  
Arcade Malleable Iron Co.....Mfrs. Castings.  
Battelle, J. W.....Mfr. Needles.  
Blake, Fernald & Blake.....Machinery.  
Bradley, Osgood.....Mfr. Railroad Cars.  
Brady, J. W.....Worcester & Nashua R. R.  
Braman, Dow & Co.....Steam & Gas Pipe.  
Brigham, Charles F. Boston Barre & Gardner R. R.  
Bushnell, Geo. H.....Mfr. Boomer Press.  
Chapin, John.....Brass Founder.

**WORCESTER—Continued.**

Clark & Knight.....Mfrs. Upright Still Engines.  
 Coates & Co.....Mfrs. Horse Clipping Machines.  
 Coe, A. G. & Co.....Mfrs. Wrenches.  
 Coe, J. Loring & Co.....Mfrs. Wrenches.  
 Colvin, Caleb.....Iron Founder.  
 Colvin, James A.....Iron Founder.  
 Compton, Geo.....Loom Mfr.  
 Cunningham, E. E.....Mfr. Band Saws.  
 Davis & Reed.....Die Makers.  
 Diamond Wrench Co.....Mfrs. Wrenches.  
 Divoli, John H.....Steam & Gas Pipe.  
 Edwards, H. F.....Architectural Iron Works.  
 Forehand & Wadsworth.....Mfrs. Firearms.  
 Guild & Pickford.....Machinery.  
 Hardy, L. & Co.....Mfrs. Machine Knives.  
 Harrington & Richardson.....Mfrs. Firearms.  
 Hart, William.....Mfr. Files.  
 Heald & Britton.....Iron Founders.  
 Hiscox, Andrew J. & Co.....Mfrs. Files.  
 Holden, C. B.....Mfr. Firearms.  
 Howe, A. M.....Die Cutter.  
 Hoyt, H. A.....Mfr. Machine Knives.  
 Humphrey, Chas. W.....Mfr. Awls.  
 Johnson, Bye & Co.....Mfrs. Firearms.  
 Junction Foundry Co.....Iron Founders.  
 Lathrop, E. & J. W.....Mfrs. Needles.  
 Lawton, J. J. & Co.....Mfrs. Files.  
 Lowell Wrench Co.....Mfrs. Wrenches.  
 McCloud & Crane.....Mfrs. Machine Screws.  
 Mason, Joseph P.....Iron & Steel.  
 Minter, Henry.....Mfr. Machine Screws.  
 Morgan, F. H.....Mfr. Steel Springs.  
 New England Nail Co.....Mfrs. Nails.  
 New England Shear Mfg. Co.  
 New York Iron Foundry Co.  
 Peabody, Jesse.....Mfr. Masons' Tools.  
 Pero, Presby.....Iron Founder.  
 Pratt & Inman.....Iron & Steel.  
 Pratt, Sumner & Co.....Machinery.  
 Rawling, James D.....Mfr. Files.  
 Richardson Mfg. Co.....Mfrs. Agl. Impls.  
 Ross, Asa.....Mfr. Spindles.  
 Sanders, H. M. & Co.....Galvanized Iron.  
 Shaw, L. & Son.....Brass Founders.  
 Shea Bros.....Mfrs. Files.  
 Southwick, H. A.....Mfr. Awls.  
 Stewart, Chas. & Son.....Boiler Makers.  
 Torrey, J. R. Razor Co.....Mfrs. Razors.  
 Vaile, Chas.....Iron Worker.  
 Warren & Tolman.....Mfrs. Agl. Impls.  
 Washburn Car Wheel Co.  
 Washburn & Garfield.....Steam & Gas Pipe.  
 Washburn & Moen Mfg. Co.....Rolling Mills.  
 Washburn Iron Co.....Mfrs. Car Wheels.  
 Webster, C. C.....Engine Builder.  
 Wells, L. H.....Brass Founder.  
 Weason, Frank.....Mfr. Firearms.  
 Wheeler, W. A.....Mfr. Wind Engines.  
 Wheeler Foundry Co.....Machinery Castings.  
 Wheelock Steam Engine Works.  
 Whittle, James H.....Sheet Iron Worker.  
 Worcester Band Saw Co.  
 Worcester Band & Jig Saw Mfg. Co.  
 Worcester File Works.  
 Worcester Machine Knife Works.  
 Worcester Machine Screw Co.  
 Worcester Needle Co.....Mfrs. Sewing Machine  
 Needles.  
 Worcester Steam & Gas Pipe Works.  
 Young, W. C.....Mfr. Tools.

**WRENTHAM.**

Brown & Cowell.....Machinery.

**MICHIGAN.****ADAMSVILLE.**

Armstrong, Samuel.....Machinist.  
 King, A. C.....Iron Founder.  
 Sword, P. L. & Son.....Machinists.

**ADRIAN.**

Adrian Brick Machine Mfg. Co.  
 Adrian Car Works.

**ADRIAN—Continued.**

Babcock, S. P.....Machinist.  
 Bate, R. L.....Gas Fitter.  
 Farrar, J. & Co.....Iron Founders & Machinists.  
 Kells & Son.....Mfrs. Brick Machines.  
 King, A. C.....Iron Founder.  
 Peninsular Car Works.  
 Wadsworth, A. R.....Iron Founder & Machinist.

**ALBION.**

Albion Mfg. Co.....Mfrs. Harrows.  
 Gale Mfg. Co.....Mfrs. Agl. Impls.  
 Gerard, J. & Co.....Machinists.  
 Goodyear, Andrew.....Mfr. Plows.  
 Maher, Geo. W.....Machinist.

**ALLEGAN.**

Allegan Agricultural Works.....Mfrs. Agl. Impls.  
 Heath, J. M.....Machinist.  
 Place, Peck & Willis.....Iron Founders.  
 Tomlinson & Heath.....Iron Founders.

**ALMA.**

Montigel, J. M. & Co.....Iron Founders.

**ALMONT.**

Currier, Henry A. & Bro.....Iron Founders.

**ALPENA.**

Bishop, F. A.....Mfr. Edge Tools.  
 Crippen, E.....Machinist.  
 Edwards, W. J.....Mfr. Plows.  
 McDougall, Alex.....Plumber.  
 McDougall & Richards.....Plumbers.  
 Slee, William.....Boiler Maker.  
 Warren & McDonald.....Iron Founders & Machinists.

**ALTON.**

Ring, Edmund.....Machinist.

**AMSDEN.**

Acker, F.....Machinist.

**ANN ARBOR.**

Ailes & Gretton.....Iron & Brass Founders.  
 Ann Arbor Agl. Co.  
 Field & Hunt.....Plumbers.  
 Humphrey, Chas.....Toledo, Ann Arbor, & Grand  
 Trunk R. R.  
 Hutzell, T. F.....Plumber & Gas Fitter.  
 McLaren, Sam'l.....Mfr. Agl. Impls.  
 Neuhoef, Henry.....Machinist.  
 Rhodes, L. F.....Machinist.

**ARKONA.**

Dalsell, J.....Millwright.

**ARMADA.**

Bailey, Edw.....Iron Founder & Machinist.  
 Young, Wm. H. & Co.....Iron Founders.

**ATHENS**

Taylor, Mrs. Mary.....Iron Founder.

**ATLANTIC MINE.**

Jackson, H.....Iron Founder & Machinist.

**ATLAS.**

Barlow Bros.....Iron Founders.  
 Rockafellow, H. E.....Iron Founder & Machinist.

**AUGUSTA.**

McCord, Jno. L.....Iron Founder.

**BANCROFT.**

Devereaux, C. P.....Iron Founder.  
 Jackson & Co.....Iron Founders.

**BATTLE CREEK.**

Battle Creek Machinery Co.  
 Brooks, Hinman & Co.....Mfrs. Agl. Impls.  
 Fonda, Cornelius.....Iron Founder.  
 Forbes, A. C.....Boiler Maker.  
 Frier & Palmer.....Iron Founder.  
 Latta, F. H.....Iron Founder.  
 Merritt, Richard B.....Mfr. Engines.  
 Nichols, Shephard & Co.....Mfrs. Threshing  
 Machines.  
 Peverly, Thos. L.....Iron Founder.  
 Styninger, J. A.....Gas Fitter.  
 Upton Mfg. Co.....Mfrs. Threshing Machines.

**BAY CITY.**

Barber, Forbush, & Stevenson .....Machinists.  
 Bay City Agl. Implt. Works.  
 Bay City Iron Co .....Founders.  
 Bay City Boiler Works.  
 Clements, J. & Sons .....Iron Pipe.  
 Emery & Garland .....Machinists.  
 Ford, Geo. ....Iron Founder & Machinist.  
 Industrial Works .....Mfrs. Engines & Boilers.  
 Like, C. E. ....Boiler Maker.  
 Logan, Scheurman & Co. ....Plumbers.  
 McKinnon, A. ....Boiler Maker.  
 McKinnon & Co. ....Boiler Makers.  
 Michigan Pipe Co. ....Mfrs. Gas & Water Pipes.  
 Munn, Thos. ....Brass Found r & Machinist.  
 Smalley Bros. & Co. ....Iron Founders & Machinists.  
 Styminger, Jno. A. ....Plumber & Gas Fitter.  
 Sullivan, Wm. ....Plumber & Gas Fitter.  
 Walther, A. ....Plumber.  
 Ward, Wm. ....Mfr. Saws.  
 Young, John. ....Plumber.

**BAY MILLS.**

Mills, A. F. ....Millwright.

**BELDING.**

Cribben & Durkee.....Iron Founders & Machinists.

**BELLEVUE.**

King, H. W. ....Millwright.  
 Robinson, H. O. ....Mfr. Agl. Impls.  
 Robinson & Griffin.....Iron Founders.

**BENONA.**

Banks, Wm. ....Iron Founder.  
 Brower, Ezra.....Mfr. Edge Tools.

**BENTON HARBOR.**

Bante & Steimbach.....Iron Founders.  
 Benton Harbor Plow Co.

**BIG RAPIDS.**

Andrews, Wm. H. ....Mfr. Saws.  
 Cannon & Gottshall.....Machinists.  
 Cannon & Davis.....Boiler Makers.  
 Haney, E. G. ....Iron Founder & Machinist.  
 Hudnutt, C. G. ....Machinist.  
 Owen, Thos. G. ....Iron Founder.

**BIRMINGHAM.**

Stanley & North.....Iron Founders.

**BLAINE.**

Parker, Esau.....Iron Founder.

**BLISSFIELD.**

Hoxie, E. & Son.....Iron Founders.

**BRIGHTON.**

Thompson, David.....Iron Founder.

**BROCKWAY CENTRE.**

Effrick & Grinnell.....Iron Founders.

**BRONSON.**

Reynolds & Williams.....Iron Founders & Mach'sts.

**BROOKLYN.**

Greene, G. W. ....Iron Founder.

**BUCHANAN.**

Morley, B. T. ....Iron Founder.  
 Talbot, W. H. ....Machinist.

**BURCH'S MILLS.**

Farr, Eli.....Machinist.

**BURNS.**

Rossiter, Byron.....Iron Founder.

**BURR OAK.**

Watson, John.....Iron Founder

**BYRON.**

Boice, J. & M. ....Iron Founders.  
 Rosseter & Clark.....Iron Founders & Machinists.

**CADILLAC.**

Burns, Alex.....Millwright.  
 Crippen, Wm. ....Machinist.  
 Cammer & Rawles.....Plumbers.  
 Wallen, H. D., Jr. ....Iron Works.

**CALEDONIA STATION.**

Taberer, H. ....Iron Founder.

**CAMDEN.**

Brown, Chas.....Iron Founder.  
 Hand, J. ....Millwright.

**CAPAC.**

Locke & Warn.....Machinists.  
 Wright, E. A. ....Machinist.

**CARO.**

Adams & Co. ....Iron Founders.  
 Alexander, G. T. ....Machinist.  
 Parks, E. ....Iron Founder.  
 Sprague, H. A. ....Iron Founder.

**CASEVILLE.**

Lake Huron Iron Co. ....Mfrs. Iron.  
 Masters, U. W. & Co. ....Iron.

**CASSOPOLIS.**

Wellig, Patch & Wellig.....Iron Founders.

**CEDAR SPRINGS.**

Farr, Wm. ....Machinist.

**CENTREVILLE.**

Allison, Wm. ....Iron Founder.

**CHAMPION.**

Champion Iron Co. ....Mfrs. Iron.

**CHARLEVOIX.**

Pine Lake Iron Co. ....Mfrs. Iron.

**CHARLOTTE.**

Beam & Mailhot.....Iron Founders.  
 Hart, H. J. & Co. ....Iron Founders.  
 Hart, Wisner & Co. ....Machinists.  
 Miller, Jno. A. ....Iron Founder.  
 Moore, A. R. ....Machinist.  
 Schuler, D. & Son. ....Boiler Makers.

**CHEBOYGAN.**

Blake, Henry A. ....Iron Founder & Machinist.  
 Hess, Wm. ....Boiler Maker.  
 Reny & Watson.....Iron Founders.

**CHELSEA.**

Miller, L. ....Iron Founder.

**CHESANING.**

Wilson Bros.....Iron Founders.

**CLARE.**

Lamb, Randolph.....Iron Founder.

**CLARKSTON.**

Carran, A. R. ....Machinery.  
 Smith, O. ....Iron Founder & Machinist.

**CLINTON.**

Cutting, H. D. ....Iron Works.  
 Woodward, David.....Iron Founder.

**CLIO.**

Smart, P. ....Iron Founder.

**COLDWATER.**

Eggleston, Geo. H. ....Plumber & Gas Fitter.  
 Ellis, Daniel.....Mfr. Mill Picks.  
 Mansell, G. O. ....Plumber.  
 Merrill, David.....Iron Founder.  
 Merrill & Stevens.....Machinists.  
 Thomas, C. H. ....Machinist.  
 Titus, L. B. ....Iron Founder.  
 Van Every, C. M. & Son.....Iron Founders.

**COLLINS.**

Megarrah, W. S. ....Millwright.

## COLON.

Dane, H. &amp; Co.....Iron Founders.

## COLUMBIAVILLE.

Gregory &amp; Johnson.....Iron Founders.

## COMSTOCK.

Peer, P. A.,.....Iron Founder.

## CONSTANTINE.

Bole, Geo. W.....Steam Fitter.

George &amp; Tweedale.....Iron Founders &amp; Machinists.

Jones, Jno. H.....Iron Founder.

## COOPERSVILLE.

McSherry &amp; Thompson.....Iron Founders.

## CORUNNA.

Baker, H. A.....Machinist.

Hicks, John.....Iron Founder &amp; Machinist.

## DAILEY.

Fields, Benj.....Iron Founder.

## DANSVILLE.

Thomson &amp; Son.....Iron Founders.

## DAVISBURG.

Hickey, Wilson.....Iron Founder.

## DECATUR.

Conklin, J. &amp; Bro.....Iron Works.

## DENTON.

Chamberlain, M. A. &amp; Son.....Iron Founders.

## DETROIT.

## IRON FOUNDERS.

Boyle, John D.....Fulton Iron &amp; Engine Works.

Buhl Iron Works.....Griffin Car Wheel Co.

Detroit Bridge &amp; Iron Works.....Ho'lge, Samuel F.

Detroit Malleable Iron Company.....Jackson, S. S.

Detroit Model &amp; Novelty Works.....Mich. Mal'ble Iron Co.

Eagle Iron Works.....Rice, Delos E.

Flower, Jas. &amp; Bros.....Russell Wheel and Foundry Co.

Frontier Iron Works.....Wilson, John B.

Wrenca &amp; Candler.

## MACHINISTS.

Benoit, J. P. &amp; Bro.....Fulton Iron &amp; Engine Works.

Bissell, David.....Hodge, Samuel F.

Brooks &amp; Scully.....Huettelman, F. &amp; Co.

Buss Machine Works.....Kennedy &amp; Greig.

Christie &amp; De Graff.....Knell, Jacob.

Combination Gas Machine Co.....Lanhoff Bros.

Cummer, F. D., Mfr. Engines.....Meade &amp; Co.

Detroit Machine Screw Works.....Michels, Jacob.

Detroit Model &amp; Novelty Works.....Murdoch, C. F.

Dry Dock Engine Works.....Murphy, Thomas.

El-enhut, L.....Rice, Delos E.

Enterprise Machine Works.....Rodda, Wm. H.

Fauser, Christian.....Soper, R. W.

Wuelfling &amp; Wolfertz.

## PLUMBERS, STEAM &amp; GAS FITTERS.

Alexander, A. G. &amp; Co.....Gubby, J. A.

Baumgardner, Frank.....Guiney, B. &amp; Co.

Bertings, Carl.....Heighton, Wm. D.

Billings, M. T.....Hill &amp; Orbitz.

Blackwood, Wm. Jr.....Holmes &amp; Webster.

Bohn, Theo.....Jack, Chas. S.

Bowerman, Wm. J.....Kelley, Thos.

Braun, Chas.....Kiefer &amp; Son.

Brunner, S.....Kramer, Geo.

Cameron, Jno. &amp; Co.....Krecker, Chas.

Detroit Metal &amp; Plumbing Works.....Kries, A. C.

Devereux, Jos. B.....Lane, S. G.

Dulea, Chas.....Lane Bros.

Dyar, J. B.....Liebold, C. E.

Finn, Robert.....Long, Wm.

Ginster, Peter.....Look, H.

Gubby, C. F.....Lovett, S. W.

McEwan, J. &amp; Son.

## DETROIT—Continued.

McKay, Alex. Sheehan, T. P.  
 Macdonald, Campbell Snell, S. C.  
 & Co. Steiner, P. C.  
 Meathe & Guiney. Strohecker, L. & Chas.  
 Monat & Shelev. Tuite, T. P. & Co.  
 O'Connor & Sullivan. Waish, Richard.  
 Quigley, Jno. Wayson & Rogers.  
 Reilly, Jno. Webster, E. F. & Co.  
 Reynolds, W. N. Welling, M. H.  
 Rider, Fred. Westaway, Jas.  
 Roberts & Thompson. Wilkin-son, T. J.  
 Ross, E. H. Wilson, W. C.  
 Rutson, A. Wilson, R. H. & Co.  
 Schehr, J. M. Wright, Peter.

## MISCELLANEOUS.

Anderson, W. H. & Co.....Mfrs. Edge Tools.  
 Barnum, E. T.....Iron.  
 Baumeister, Jno.....Copper-smith.  
 Bennett, W. C. & Co.....Mfrs. Edge Tools.  
 Benoit, J. P. & Bro.....Brass Founders.  
 Bolles, J. E. & Co.....Iron.  
 Brennan, Jno.....Boiler Maker.  
 Brooks & Scully.....Engine Builders.  
 Buhl, Ducharme & Co.....Mfrs. Nails & Spikes.  
 Bush, M. E.....Brass Founder.  
 Burr & Son.....Mfrs. Files.  
 Cain, Nicholas.....Mfr. Mill Picks.  
 Carroll Bros.....Boiler Makers.  
 Cheney Anvil & Vise Co.  
 Clark, C. B. Mfg. Co.....Mfrs. Hardware.  
 Collier, W. W. & Co.....Iron & Steel.  
 Desotell & Hutton.....Boiler Makers.  
 Detroit Car Spring Co.  
 Detroit Car Wheel Co.  
 Detroit Copper & Brass Rolling Mills.  
 Detroit Iron & Brass Mfg. Co.  
 Detroit & Lake Superior Iron Mfg. Co.  
 Detroit Lead Pipe & Sheet Lead Works.  
 Detroit Safe Co.  
 Detroit Steel Works.  
 Detroit Stove Works.  
 Ducharme, Fletcher & Co.....Iron, etc.  
 Ferguson, Samuel.....Plumbers' Supplies.  
 Flower, Jas. & Bros.....Brass Founders.  
 Galvin Bros.....Brass Founders.  
 Griffin Car Wheel Co.....Mfrs. Car Wheels.  
 Gubby, J. A.....Copper & Sheet Iron.  
 Hart, Henry C. & Co.....Mfrs. Hardware.  
 Harvey, A. & Son.....Brass Founders.  
 Henris, Wm.....Sheet Iron W-rks.  
 Hopson, R. H. & C.....Mfrs. Sheet Iron.  
 Howe Hardware Mfg. Co.  
 Hunter, Geo. S.....Mfr. Chains.  
 Jenks, Jas.....Machinery.  
 Jewett, S. S. & Co.....Stove Founders.  
 Johnstone, H. M.....Coppersmith.  
 Lanhoff Bros.....Machinery.  
 Leland Iron Co.....Mfrs. Iron.  
 McDonald, J. C. & Co.....Mfrs. Bolts.  
 McGregor, Thos.....Boiler Maker.  
 McGregor, J. & Sons.....Boiler Makers.  
 McIntire, J. M. & Co.....Millwrights.  
 Major & Baxter.....Brass Founders.  
 Marshall Car Co.  
 Mellus, H. & P.....Mfrs. Saws.  
 Michigan B-lt & Nut Works.  
 Michigan Car Co.  
 Michigan Stove Co.  
 Miller, John.....Shipsmith.  
 Miner Bros.....Coppersmiths.  
 Nash, Herman.....Mfr. Mill Picks.  
 Peninsular Car Works.  
 Peninsular Stove Works.  
 Pittman, J. E.....Iron.  
 Pratt, Stephen.....Boiler Maker.  
 Putnam, A. T. & Co.....Mfrs. Edge Tools.  
 Quigley, John.....Coppersmith.  
 Rathbone, Sard & Co.....Stove Founders.  
 Ridgley, R. B.....Steel.  
 Rohns & Schaefer.....Iron.  
 Rood, H. W. & Co.....Brass Founders.  
 Rowe & Hay-s.....Mfrs. Files.  
 Rowley, M. N.....Mfr. Scales.  
 Sprenger, Joseph.....Boiler Maker.  
 Standart Bros.....Iron, &c.

**DETROIT—Continued.**

Thompson, Walter.....Mfr. Brass Goods.  
 Viger, A. E.....Iron.  
 Wain, Wm. E.....Machinery.  
 Walker, James, & Son.....Coppersmiths.  
 Webster, Jno.....Millwright.  
 Welz, G. Philip.....Mfr. Saws.  
 Winkelmeier, Jos.....Mfr. Edge Tools.  
 Wormer, G. S., & Sons.....Machinery.  
 Wuelling & Wolfertz.....Mfrs. Cutlery.  
 Young, Saml.....Mfr. Stoves.  
 Zabriskie & Thorpe.....Mfrs. Edge Tools.

**DEWITT.**

Merritt, Richmond.....Iron Founder.

**DIMONDALE.**

Baker, A. C.....Iron Founder.

**DISCO.**

Bixby, M.....Machinist.

**DOWAGIAC.**

Beckwith, P. D.....Iron Founder.  
 Dowagiac Mfg. Co.....Mfrs. Harrows.  
 Warner, Morlan & Byers.....Iron Founders.

**DRAKE.**

Moses, B.....Millwright.

**DRAYTON PLAINS.**

Walker, Wm.....Millwright.

**DRYDEN.**

Darwood, J.....Iron Founder.

**DUNDEE.**

Eldridge, Chas.....Iron Founder & Machinist.  
 Ford, V. D.....Millwright.

**DUPLAIN.**

Rowell, Stephen.....Iron Founder.

**EAST BAY.**

Williams, J. C.....Millwright.

**EAST SAGINAW.**

Bartlett, A. F., & Co.....Pioneer Iron Works.  
 Bridgman, Geo. R.....Plumber.  
 Cantuon, J. C., & Co.....Plumbers.  
 East Saginaw File Co.....  
 Gage Bros.....Coppersmiths & Sheet Iron.  
 Gray & Wildman.....Boiler Makers.  
 Koehler Bros.....Machinists.  
 McLellan Bros.....Mfrs. Files, Saws, &c.  
 Merrill & Bacon.....Machinists.  
 Michigan Axle & Tool Co.....  
 Michigan Saw & File Works.....  
 Motts & Merrill.....Machinists.  
 Steele & Wildman.....Boiler Makers.  
 Wickes Bros.....Iron Founders & Machinists.

**EAST TAWAS.**

Walker, Jno.....Machinist.

**EATON RAPIDS.**

Gallery, James, & Son.....Iron Founders.  
 Le Fever, Geo.....Millwright.  
 Spencer, H. H.....Plumber.  
 Springer, O. H. P.....Mfr. Cutlery.

**EDMORE.**

Miner, Fred. J.....Machinist.

**EDWARDSBURG.**

Mead, Hiram B.....Iron Founder.  
 Sweetland, Wm. W.....Machinist.

**ELBA.**

Fuller, A. E.....Machinist.  
 McAlpin, D.....Iron Founder.

**ELSIE.**

Eddy & Eddy.....Machinists.

**EMMET.**

Cogley, James.....Iron Founder.

**ESCANABA.**

Jackson Iron Co.....Mfrs. Iron.

**EVART.**

McManus, John.....Iron Founder & Machinist.

**FARMINGTON.**

Wilbur, James L.....Iron Founder.

**FENTON.**

Coe, C. W.....Mfr. Bolt Cutters.  
 Fitch, L., & Son.....Iron Founders.  
 Gorton, F.....Machinery.

**FERRYSBURG.**

Johnston Bros.....Boiler Makers.  
 Ottawa Iron Works Co.....

**FLINT.**

Castree & Odell.....Iron Founders & Machinists.  
 Cooper, Levi, & Son.....Mfrs. Edge Tools.  
 Flint Engine & Brass Foundry.  
 Genesee Iron Works.

Hamilton, Frank P.....Gas Fitter.  
 Hannah, Joseph.....Boiler Maker.  
 Hudson & Kressler.....Engine Builders.  
 Kimball, Geo. C.....Iron Works.  
 Mallery, H. N., & Son.....Mfrs. Hammers.  
 Warren, Thomas.....Iron Founder.  
 Woodhouse, Thos.....Mfr. Saws.

**FLUSHING.**

Sammers, J.....Iron Founder & Machinist.  
 Smith, Leroy.....Mfr. Agl. Impts.

**FORMAN.**

Cavanaugh, J.....Millwright.

**FOWLERVILLE.**

Pullen & Son.....Iron Founders & Machinists.

**FRANKENMUTH.**

Schmuck, A.....Millwright.

**FRANKFORT.**

Banks & Brown.....Iron Founders.  
 Markham, F. E.....Machinist.

**FRUITPORT.**

Spring Lake Iron Co.

**GALESBURG.**

Strait Windmill Co.....Iron Founders & Machinists.

**GALIEN.**

Cornwell & Miller.....Boiler Makers.  
 Montrose, R. W.....Mfr. Bolt Sawing Machines.  
 Straight & Co.....Iron Founders.

**GOODRICH.**

Caswell & Trollop.....Iron Founders.

**GRAND HAVEN.**

Bryce, Bloecker & Co.....Founders and Machinists.  
 Connell, J. O.....Plumber.  
 Johnston, H. W.....Plumber & Gas Fitter.  
 O'Connor, J.....Plumber.  
 O'Connell, Jas.....Plumber & Gas Fitter.  
 Wait Mfg. Co.....Mfrs. Agl. Impts.

**GRAND LEDGE.**

Beach, Moses P.....Iron Founder.  
 Streeter, Hiram R.....Iron Founder.

**GRAND RAPIDS.****MACHINISTS.**

Arnold, H. L.....Perkins & Co.  
 Buss Machine Works.....Porter, C. O.  
 Butterworth & Lowe.....Simonds, Jas. C.  
 Deane & Son.....Smith, Warren M.  
 Farmer, Thos. Jr.....Wheeler, E. J., & Bro.  
 Hartman & Dietz.....Whittemore & Dodds.  
 Jacoboice, Joseph.

**MISCELLANEOUS.**

American R. R. Supply Co.  
 Bradley, S. D.....Grand Rapids & Indiana, R. R.  
 Brown, Wm. A.....Plumber.  
 Butterworth & Lowe.....Iron Founders.  
 Chase & Munson.....Mfrs. Edge Tools.  
 Chubb, A. L., & Co.....Iron Founders.

**GRAND RAPIDS—Continued.**

Cox, Wm.,.....Valley City File Works.  
Deane & Son,.....Iron Founders.  
Dennison, Wm. C.,.....Machinery.  
Detric & Hoffman,.....Steam Fitters.  
Edge, P. H.,.....Mfr. Saws.  
Everhart, T. J.,.....Mfr. Saws.  
Gill, Leonard T.,.....Mfr. Saws.  
Grand Rapids Mfg. Co.,.....Mfrs. Agl. Impls.  
Haney Mfg. Co.,.....Iron Founders.  
Hartman, Fred'k.,.....Iron Founder.  
Hoffman, F. G.,.....Plumber.  
Houser, Jos.,.....Mfr. Files.  
Leitelt, A.,.....Iron Works.  
Lindner, J. G.,.....Mfr. Files.  
McDermott & Runyons,.....Plumbers.  
McDonald, P.,.....Boiler Maker.  
Miller, Wm.,.....Plumber and Gas Fitter.  
Milmine, H. B., & Co.,.....Iron Works.  
Shriver, Weatherly & Co., Iron Wks & Plumbers.  
Smith, H. S., & Co.,.....Mfrs. Agl. Impls.  
Sokup, F. J., & Co.,.....Iron.  
Sproul & McGurrian,.....Plumbers & Gas Fitters.  
Sullivan, Daniel,.....Boiler Maker.  
Thompson & Robertson,.....Plumbers.  
Wallen, H. D. Jr.,.....Iron Works.

**GREENVILLE.**

Maxted & Moores,.....Iron Founders.  
Tawer & Bros.,.....Iron Founders.

**HADLEY.**

Proctor, J. D., & Bro.,.....Iron Founders.

**HANCOCK.**

Coon, Geo. F.,.....Mineral Range R. R.

**HARTFORD.**

Leach, Chas. J., & Co.,.....Machinists.

**HARTLAND.**

Hildebrandt, S.,.....Iron Founder.

**HASTINGS.**

Bentley Bros., & Wilkins,.....Iron Founders.  
Kelly & Evans,.....Machinists.  
Wilkins & Greisel,.....Iron Founders.

**HILLSDALE.**

Dunton, A. F., & Co.,.....Mfrs. Edge Tools.  
PHELPS, Edward,.....Iron Founders & Machinists.  
Sparrow, Henry,.....Iron Founder.

**HOLLAND.**

Deming, Wm H.,.....Iron Founder.  
Wilms, Peter H.,.....Mfr. Agl Impls.

**HOLLY.**

Byer, Edgar E.,.....Machinist.  
Church & Williams,.....Iron Founders.  
Smoke Plow Co.,.....Iron Founders.

**HOMER.**

Gibbs, Mason,.....Mfr. Agl Impls.  
Hopkins, H. L.,.....Iron Founder.

**HOUGHTON.**

Cleares, S. E., & Son,.....Iron Founders.  
Hodge, Sam'l. F.,.....Iron Founder & Machinist.  
Lake Superior Iron Co.,.....  
Portage Lake Foundry and Machine Works.

**HOWARD CITY,**

Southard, Joseph,.....Millwright.

**HOWELL.**

Clark, J. M.,.....Iron Founder.  
Curtis & Sons,.....Machinists.

**HUBBARDSTOWN.**

Stuck, Albert,.....Iron Founder.

**HUDSON.**

Hudson Mfg. Co.,.....Mfrs. Plows.  
Lane & Beach,.....Machinists.  
Randell, J. W.,.....Engine Builder.  
Weaver, Norman,.....Iron Founder.

**HUMBOLDT.**

Humboldt Iron Co.

**IMLAY CITY.**

Matthews, Wm. L.,.....Iron Founder.

**IONA.**

Arnold, G. W. & Son,.....Machinists & Mfrs. Edge Tools.  
Bush & Son,.....Iron Founders.  
Dye, G. H.,.....Machinist.  
Sanford & Chubb,.....Iron Founders.

**ISHPEMING.**

Cole Bros.,.....Boiler Makers.  
Deer Lake Iron and Lumber Co.,.....Iron, &c.  
Merritt, D. H.,.....Iron Founder.

**ITHACA.**

Wells & Whitney,.....Iron Founders.

**JACKSON.**

Bennett Machine Co.,.....Iron Founders & Mach'ts.  
Dennis, E., & Co.,.....Machinists.  
Dickey Manufacturing Co.,.....Mfrs. Chain.  
Dunbar & Trumble,.....Mfrs. Sulky Plows.  
Eaton, J. B.,.....Plumber.  
Edgerley, S. H.,.....Michigan Central R. R.  
Hibberd & Smith,.....Iron Founders & Machinists.  
Husen, H. M., & Son,.....Mfrs. Files.  
Lindemer, Charles,.....Plumber.  
Lusk & Co.,.....Iron Founders.  
McGregor Bros. & Co.,.....Boiler Makers.  
Porter, Benj., & Son,.....Plumbers & Gas Fitters.  
Rodenbaugh Mfg. Co.,.....Machinists.  
Sanford & Co.,.....Machinists.  
Walcott, George D.,.....Machinist.  
Wirtz, S. J.,.....Plumber.  
Withington & Cooley Mfg. Co., Mfrs. Agl. Impls.

**JONESVILLE.**

Miller, R. T., & Son,.....Iron Founders.  
Taber & Houck,.....Iron Founders.

**KALAMAZOO.****AGRICULTURAL IMPLEMENT MFRS.**

Allen, O. M.,.....Harrow Spring Co.  
Bauman, N. & Sons,.....Lawrence & Chapin.  
Cahill, L., & Co.,.....Kiltz & Co.  
Chase, Taylor & Co.,.....Reed, D. C. & H. C., & Co.  
Cobb, Hiram,.....Schau & Schuster.  
Crosby, C. A., & Co.,.....Tyler & Turner.  
Dodge Plow Co.,.....Waterbury, D., & Co.  
Dunbar & Trumble.

**MISCELLANEOUS.**

Bird & Clavage,.....Iron Founders & Machinists.  
Bremer, Godfrey J.,.....Iron Founder.  
Buckley, Thos. & Co., Iron Founders & Machinists.  
Carr & Engleman,.....Plumbers.  
De Kam, Jacob,.....Plumber.  
Dorgan, Thomas,.....Plumber.  
Dutton, C. H.,.....Boiler Maker.  
Egleston, L., & Co.,.....Mfrs. Springs & Axles.  
Gibson, H. A.,.....Iron Founder.  
Gibson Machine Works,.....Engine Builders.  
Green, George F.,.....Machinist.  
Hill, W. E., & Co.,.....Machinists.  
Rhodes & Dean,.....Iron Founders & Machinists.  
Strong, Eli,.....Millwright.

**KENDALL.**

Miller, William,.....Machinist.

**LA GRANGE.**

Maughan, H. H.,.....Iron Founder.

**LAINGSBURG.**

Shirts Bros. & Co.,.....Iron Founders & Machinists.

**LAKEVIEW.**

Baker & Co.,.....Iron Founders and Machinists.  
Conant, L. B.,.....Iron Founder.

**LAKEVILLE.**

Snyder & Boice,.....Iron Founders.

**LANSING.**

Allen, Frederick M.,.....Mfr. Chain.  
Bement, E., & Sons,.....Iron Founders.  
Cady, Glassbrook & Co., Iron Founders & Mach'ts.



**LANSING—Continued.**

Cooley, E. F. .... Plumber.  
 Herrick, Chas. K. .... Plumber and Gas Fitter.  
 Jarvis, Barnes & Co. Engine Bldrs. & Boiler Mkrs.  
 McKeen & Marcellus. .... Millwrights.  
 Olds, P. F., & Co. .... Machinists.  
 Thompson, E. S., & Co. .... Machinery.  
 Van Ceulebroeck, A. .... Boiler Maker.

**LAPEER.**

McDonald, Wm., & Son. .... Iron Founders.  
 Todt Brothers. .... Machinists.  
 Varnum & Walker. .... Iron Founders.

**LAWRENCE.**

Dane, L. J. .... Iron Founder.

**LAWTON.**

Wilcox, J. L. .... Machinist.

**LESLIE.**

Baker, Carter & Co. .... Iron Fdrs. and Machinists.  
 Sabin, Anson. .... Iron Founder.

**LEXINGTON.**

Gould, H. .... Iron Founder.

**LINDEN.**

Harris, Myron. .... Iron Founder.  
 Moorhouse, Anson. .... Stove Founder.  
 Sadler, Seth C., Jr. .... Iron Founder.

**LOWELL.**

Nash, H. .... Mfr. Edge Tools.

**LUDINGTON.**

Davis, Thomas E. .... Boiler Maker.  
 Goodsell, G. & Co. .... Machinists.  
 Goodsell & Crawford. .... Iron Founders.  
 Patterson, Robert B. .... Iron Works.

**LYONS.**

Arnold, Jas. H. & Son. .... Mfrs. Edge Tools.  
 Tunmore & Church. .... Iron Founders.

**McBRIDE'S.**

Hill, Frank J. .... Machinist.

**MANCHESTER.**

Dickinson, Amos. .... Iron Founder.  
 Trefether, C. S. .... Machinist.

**MANISTEE.**

Batty & Broadhead. .... Mfrs. Saws and Edge Tools.  
 Bowle, John. .... Iron Worker and Machinist.  
 Hyland, Joseph. .... Boiler Maker.  
 Jack, Andrew. .... Boiler Maker.  
 Kirkland, J. .... Gas Fitter.  
 Kirsch, Massey & Co. .... Boiler Makers.  
 Wheeler, Johnson & Co. .... Iron Founders.

**MANTON.**

Overhiser, Wm. .... Millwright.  
 Richardson, J. V. .... Millwright.

**MAPLE RAPIDS.**

Jones & Terry. .... Iron Founders.

**MARION.**

Murray, Geo. .... Machinery.

**MARQUETTE.**

Burt, Hiram A. .... Iron.  
 Byrne & Blackwood. .... Gas Fitters.  
 Cone & Beals. .... Machinists.  
 Hopkins, H. J. .... Plumber.  
 Merritt, Daniel H. .... Iron Founder.  
 Pickands, James & Co. .... R. R. Supplies.  
 Williams, W. H. .... Marquette, Houghton, and Ontonagon R. R.

**MARSHALL.**

Adams, Jno. .... Iron Founder.  
 Bullard, Geo. A. .... Iron Founder.  
 Engleman, Julius. .... Plumber.

**MASON.**

Beech, Jesse. .... Iron Founder.

**MAYVILLE.**

Wadley, John. .... Iron Founder.

**MEMPHIS.**

Clegg, John. .... Iron Founder and Machinist.  
 Eaton, W. M. & Sons. .... Iron Founders.

**MENDON.**

Anton & Rose. .... Iron Founders.  
 Richards & Allen. .... Iron Founders.

**MENOMINEE.**

Harrocks, Matthew. .... Iron Founder.  
 King, H. S. & Co. .... Iron Works.  
 Young, Louis. .... Boiler Maker.

**MIDDLEVILLE.**

Lane, J. W. .... Machinist.

**MILAN.**

Taylor, Amos T. & Son. .... Iron Founders.

**MILFORD.**

Jewett & Bros. .... Iron Founders.  
 Kipp Wells Mfg. Co. .... Agl. Impls.  
 Wells Bros. .... Iron Founders.

**MILLINGTON.**

Boltwick, Alonzo. .... Iron Founder.

**MINDEN TOWNSHIP.**

Mudge & Shader. .... Iron Founders.  
 Stipe, Geo. & Sons. .... Iron Founders.

**MONROE.**

Alexander, Jno. .... Iron Founder.  
 Maclaren, Duncan & Co. .... Iron Founders.  
 Smith, J. J. .... Mfrs. Iron Fences.  
 Wilder Mfg. Co. .... Mfrs. Agl. Impls.

**MONTAGUE.**

Wilson & Hendrie. .... Iron Founders & Machinists.

**MORENCI.**

Baker, L. .... Machinist.  
 Baker & Mills. .... Iron Founders.  
 Chappell, W. H. .... Iron Founder & Machinist.  
 Crabbs, J. C. .... Machinist.

**MORLEY.**

Pelton, L. A. .... Gas Fitter.

**MORRICE.**

Howden, J. J. .... Plumber.

**MOSCOW.**

Murray, J. N. & Son. .... Iron Founders.

**MOUNT CLEMENS.**

Donaldson Bros. .... Iron Founders.  
 Gale, Samuel S. .... Coppermiths.  
 Ormsby, Harvey. .... Millwright.  
 Zahn, Wm. .... Iron Founder & Machinist.

**MOUNT MORRIS.**

Smith, Darius E. .... Iron Founder.

**MOUNT PLEASANT.**

Procter & Bamber. .... Iron Founders.

**MUIR.**

Kimball & Smith. .... Iron Founders.

**MUSKEGON.**

Barcus Bros. .... Mfrs. Saws.  
 Britton, John. .... Machinery.  
 Davies, Joshua. .... Iron Founder & Machinist.  
 Gregory, T. B. .... Mfr. Saws.  
 Howden, J. J. .... Gas Fitter.  
 Miller, Thos. & Co. .... Iron Founders.  
 Muskegon Car & Engine Works.  
 Rodgers Bros. .... Iron Founders.  
 Turnbull, Woodward & Co. .... Boiler Makers.

**NASHVILLE.**

Wood, James M. .... Iron Founder.

**NILES.**

Dodge, C. K. .... Machinist.  
 Dodge R. R. Standpipe & Machinery Co.  
 Kirkham, J. J. .... Gas Fitter.  
 Moore, W. M. .... Machinist.  
 Niles Chilled Plow Co.  
 Sheehan, D. .... Gas Fitter.  
 Willing Chilled Plow Co.

**NORTH BRANCH.**

Butler, Wm.....Iron Founder.

**NORWAY.**

Calumet Iron Co. ....Indiana Iron Co.

**OAKWOOD.**

Rice, T. H.....Iron Founder.

**ORTONVILLE.**

Brokenshaw, W. H.....Iron Founder.

**OSCODA.**

Crippen, Schofield.....Iron Founder &amp; Machinist.

**OTSEGO.**

Foster, S. D.....Machinist.

Johnson, Chester.....Machinist.

Milk &amp; Edsell.....Mfrs. Hoes.

**OVID.**

Hayt &amp; Bement.....Iron Founders.

**OWOSSO.**

Canfield, A. F.....Mfr. Edge Tools.

Howell &amp; Co.....Iron Founders &amp; Machinists.

Yeats, Osborn &amp; Co.....Iron Founders.

**OXFORD.**

Malcolm, Chas. P.....Iron Founder.

Rice, T. H.....Iron Founder.

**PALO.**

Millard, Frank &amp; Co.....Mfrs. Plows.

Miller, H. R. &amp; Co.....Iron Founders.

**PARIS.**

Johnson, James.....Millwright.

**PARMA.**

McGee, C. E.....Machinist.

**PARSHALLVILLE.**

Gibson, G.....Iron Founder.

**PAW PAW.**

Mason, W.....Iron Founder.

Randall, W. H.....Mfr. Plows.

Sabin, Geo.....Iron Founder.

Snow, M. &amp; Son.....Mfrs. Plows.

Snow Bros.....Iron Founders.

**PINE GROVE MILLS P. O.**

Everest &amp; Wise.....Mfrs. Harrows.

Haynes, E. H. &amp; Co.....Iron Founders.

**PINE RUN.**

Tinker &amp; Son.....Iron Founders.

**PLAINFIELD.**

Bush, Ezra T.....Machinist.

**PLAINWELL.**

Putnam, R. S.....Iron Founder.

**PLYMOUTH.**

Shafer, A. A. &amp; Soas.....Iron Founders.

**PONTIAC.**

Clark, Mary J.....Machinist.

Dole, Chas. &amp; Son.....Iron Founder.

Hickey, Lyman.....Iron Founder.

King, A. S.....Iron Founder.

Weston, H.....Mfr. Files.

**PORTAGE LAKE.**

Sheldon, R.....Iron Founder.

**PORT HURON.**

Barnett, Hiram.....Iron Founder.

Dole, Chas. &amp; Son.....Plumbers.

Fitzgerald, J. H.....Iron Founder.

Jenks, W. L. &amp; O. S.....Machinists &amp; Boiler Makers.

Love &amp; Scofield.....Boiler Makers.

Mitchell Iron Works.....

P. ache, W. E.....Boiler Maker.

Rudge, Jno.....Iron Founder.

Walker, Jos &amp; Co.....Gas Fitters.

White, Henry.....Boiler Maker.

**POTTERSBURO.**

Parker, Esau.....Machinist.

**PORTLAND.**

Bates, Wm.....Iron Founder.

Warren, Chauncey J.....Machinist.

**PRITCHARDVILLE.**

Pritchard, C. &amp; G. ....Iron Founders.

**QUINCY.**

Wilber, A. D.....Iron Founder.

Wolcott &amp; Wilber.....Iron Founders.

**QUINNESEC.**

Cassad, C. D. &amp; Co.....Machinists.

Young, Louis.....Boiler Maker.

**READING.**

Schermerhorn, Wm. S.....Iron Founder.

**REED CITY.**

Brown, J. L.....Machinist.

Johnson, L. J.....Iron Founder.

**RICHMOND.**

Miller, Theodore.....Iron Founder.

**RIVER BASIN.**

Kapp, A.....Millwright.

**ROCHESTER.**

Jackson, Wm. H.....Iron Founder.

**ROCKFORD.**

Tower &amp; Powell.....Iron Founders &amp; Machinists.

**ROCKWOOD.**

Buchman R. R.....Iron Founder.

**ROGERS CITY.**

Platz, Chas.....Machinist.

**ROLLIN.**

Fitts, H.....Millwright.

**ROME.**

Hamblin &amp; Hudson.....Machinists.

Hosner, Riley J.....Iron Founder &amp; Machinist.

Morton Valve Co.....Machinists.

Wintemute, A. G.....Iron Founder.

**RUBY.**

Stipe, G.....Millwright.

**SAGINAW.**

Bruno, Theo.....Machinist.

Jackson, Jno. L.....Iron Founder.

Kinsey, N. B.....Iron Founder &amp; Machinist.

McGregor, James.....Boiler Maker.

Saginaw Iron Works.....

Saginaw Novelty Works.....Brass Founders.

**SAINT CLAIR.**

McClellan, A. J.....Iron Founder.

**SAINT IGNACE.**

Hicks, Jno.....Iron Founder.

**SAINT JOSEPH.**

Anderson &amp; Kolman.....Iron Founders.

**SAINT LOUIS.**

Chapel, Geo. E.....Chicago, Saginaw &amp; Canada R. R.

Hilton &amp; Gordon.....Iron.

Holcomb, H. L.....Iron Founder.

**SALINE.**

Gross, J. G. &amp; Bro.....Iron Founders.

**SAULT DE STE MARIE.**

Eaton, Chas. B.....Machinist &amp; Boiler Maker.

Gardner, J. J.....Mfr. Plows.

**SCHOOLCRAFT.**

Fellows Bros.....Iron Founders.

**SEESWAING.**

Winterhalter, Geo.....Iron Founder.

**SHEPARDVILLE.**

Bradfield, J. P.....Iron Founder.

**SMYRNA.**

Bignell &amp; Bro.,.....Iron Founders.

**SOUTH GLENDON.**

Tuller, W.,.....Millwright.

**SOUTH CAMDEN.**

Brown, Wm.,.....Iron Founder.

**SOUTH FRANKFORT.**

Markham, F.,.....Iron Founder.

**SOUTH HAVEN.**

Moore &amp; Mackey.....Iron Founders.

**SPALDING.**

Archibald, A. A.,.....Millwright.

**SPRING LAKE.**

Brown &amp; McAllister.....Machinists.

Pearson &amp; Hungerford.....Plumbers.

**SPRINGPORT.**

Comstock, E.,.....Machinist.

Cook, J. F.,.....Machinist.

Everett &amp; Burchfink.....Iron Founders.

**SPRINGWELLS.**

Baugh Steam Forge Co.,.....Rolling Mill.

Walker, J. R.,.....Mfr. Iron Harrows.

**STANTON.**

Herrman Bros.,.....Mfrs. Saws.

Min-r, Wm.,.....Iron Founder &amp; Machinist.

Mummery, D.,.....Boiler Maker.

**STURGIS.**

Berridge Double Cutting Shear Co.

Drake, Jno. C. &amp; Co.,.....Iron Founders.

**SUTTON'S BAY.**

Leos, Wm.,.....Iron Founder.

**TECUMSEH.**

Brewer, Horace &amp; Co.,.....Iron Founders.

Crossman, E. R.,.....Iron Founder.

Palmer, A. J.,.....Machinist.

Raymond, H.,.....Machinist.

Welling, P. J.,.....Machinist.

**THORNVILLE.**

Caulkins, T. P.,.....Machinist.

Hilliker, T. &amp; M.,.....Iron Founders.

**THREE RIVERS.**

Nichols &amp; Pierson.....Mfrs. Car Wheels.

Prutzman, A. C.,.....Mfr. Agl. Implt.

Roberts, Throp &amp; Co.,.....Mfr. Threshing Machines.

Three Rivers Mfg. Co.,.....Iron Founders.

**TRAVERSE CITY.**

Holdsworth, P.,.....Iron Founder.

**UNION CITY.**

Ney Plow Co.

**VANDALIA.**

Reiff &amp; Thurston.....Iron Founders.

**VASSAR.**

Adams &amp; Co.,.....Iron Founders.

**VERNON.**

Jones, E. H. &amp; Sons.....Iron Founders &amp; Machinists.

**VICKSBURG.**

Ives, Bush &amp; Co.,.....Iron Founders.

**WAHJAMEGA.**

Depew, H. Y.,.....Millwright.

**WARREN.**

Mason, J. C.,.....Iron Founder.

**WATERFORD.**

French, C. M.,.....Iron Founder and Machinist.

Lord, D. R.,.....Iron Founder.

**WATROUSVILLE.**

Quain, J. L.,.....Iron Founder.

**WAYLAND.**

Hoyt, Edwin E. &amp; W. V.,.....Iron Founders.

**WAYNE.**

Weed, E. B.,.....Iron Founder.

**WILLIAMSTOWN.**

Clark &amp; Willson.....Iron Founders.

Steel, J. H.,.....Iron Founder.

**WIXOM.**

Chambers Bros.,.....Iron Founders.

**WOODLAND.**

Hough, C. A.,.....Machinist.

**WYANDOTTE.**

Eureka Iron Co.

Peninsular Stove Co.

Wyandotte Rolling Mill Co.

**YPSILANTI.**

Ferrier, Philo &amp; Son.....Iron Founders &amp; Machinists.

Hayton, R. C.,.....Gas Fitter.

Lang &amp; Martin.....Iron Founders &amp; Machinists.

McCullough, J. J. &amp; W. L.,.....Iron Founders.

McPherson, Edward D. Mfr. Threshing Machines.

Mallion, Wm.,.....Gas Fitter.

Union Spring Co.

Worden, A. &amp; Bro.,.....Iron Founders.

**MINNESOTA.****ADAMS.**

Olsen, G.,.....Machinist.

**ALBERT LEA.**

Hall, Frank.....Iron Founder.

Sherman, S. N.,.....Machinery.

Torgoson, T. L.,.....Machinery.

Zwiebel, Anton.....Machinist.

**ALEXANDRIA.**

Arnot &amp; McCrary.....Mfrs. Plows.

Solum &amp; Englund.....Machinery.

**ANAWAUK.**

Doolittle, F. H.,.....Machinist.

**ANOKA.**

Pratt, G. C.,.....Machinist.

**APPLETON.**

Norris, Samuel &amp; Sons.....Machinery.

**ARLINGTON.**

Hanson, Peter.....Machinery.

**ATWATER.**

Anderson, C. L.,.....Machinery.

**AUDUBON.**

Skein, E.,.....Machinery.

**AUSTIN.**

Ames Bros.,.....Iron Founders.

**BEARDSLEY.**

Hoybey, A.,.....Mfr. Plows.

**BENSON.**

Kennedy, J.,.....Founder &amp; Machinist.

**BIG LAKE.**

Knowlton, G. W.,.....Machinery.

**BIRD ISLAND.**

Keenan, E. H.,.....Machinery.

**BRAINERD.**

Farrar, A. P.,.....Northern Pacific R. R.

**BRECKINRIDGE.**

Seeley, W. A. &amp; Co.,.....Machinery.

**BROWN'S VALLEY.**

Gordon, Samuel &amp; Son.....Machinery.

**BROWNTON.**

Knoerr &amp; Brown.....Mfrs. Plows.

**CANBY.**

Ericson, P. G.,.....Machinery.

**CANNON FALLS.**

Bacon Bros.....Founders and Machinists.

**CARVER.**

Knoblanch, A. &amp; Co.....Machinery.

**CENTRE CITY.**

Bengtson &amp; Son.....Machinery.

**CHATFIELD.**

Crittenden, S.....Machinery.

**CLAREMONT.**

Gibbons, F. &amp; J.....Machinery.

**DEXTER.**

Gaskill, J. L.....Machinery.

**DODGE CENTRE.**

Ingalls, J.....Machinery.

**DOVER CENTRE.**

Brown, Adam.....Machinery.

**DULUTH.**

Duluth Iron Co.....

M. Lean, A. B. &amp; Co.....Iron Founders.

Walsh, J. B.....Boiler Maker.

Walsh Bros.....Boiler Makers.

**ELK RIVER.**

Upham, G. B.....Machinery.

**FARIBAULT.**

Faribault Iron Works.....

Fuller &amp; Cosgrove.....Machinists.

Moore, A.....Iron Founder.

Sitze, John.....Plumber &amp; Gas Fitter.

Stewart &amp; Winter.....Iron Founders.

Volz, J. &amp; V.....Mfrs. Plows.

**FARMINGTON.**

Needham &amp; Bros.....Founders &amp; Machinists

**FERGUS FALLS.**

Boyd &amp; Smith.....Iron Founders.

Breuer, C. M.....Machinist.

Deakin &amp; Smith.....Iron Founders.

Ferguson Falls Foundry &amp; Mfg. Co.....Mfrs. Agl. Impls.

Shelman, A. F.....Machinist.

Smith, Geo. B.....Mfr. Plows.

**FISHERS LANDING.**

Oleson, O.....Machinery.

Stunerson Bros.....Founders &amp; Machinists.

**FULDA.**

Terry, Alfred.....Machinery.

**GLENCOE.**

Frankenfield &amp; Co.....Machinery.

Welch &amp; Wormerskischen.....Machinery.

**GRANITE FALLS.**

Schwieger &amp; Stoppe.....Machinery.

**HASTINGS.**

Conklin, Chas. J.....Machinist.

Judge, P. L.....Machinist.

Warsop, A.....Found r &amp; Machinist.

**HECTOR**

Chapman, James.....Machinery.

**HENDERSON.**

Bisson, C. &amp; Bro.....Machinery.

**HERMAN.**

Hodgson, Thos. C.....Machinery.

**HOLMES CITY.**

Wranghborg, J. P.....Machinist.

**HUTCHINSON.**

Summers Bros.....Iron Founders.

**JORDAN.**

Keene, M.....Machinist.

**KASOTA.**

Ostrander, M.....Founder &amp; Machinist.

Perry, H.....Machinist.

**KASSON.**

Johnson &amp; Rennings.....Mfrs. Plows.

**LAC QUI PARLE.**

Jacobson &amp; Oadson.....Founders &amp; Machinists.

**LAKE CITY.**

Gillett, H. &amp; Son.....Founders &amp; Machinists.

Neal, Johns &amp; Co.....Mfrs. Plows.

Thayer, G. W.....Machinist.

Wilson &amp; Miller.....Machinery.

**LAKE PARK.**

Holton, Theo.....Machinery.

**LANESBOROUGH.**

Swenson, Martin.....Car Works.

**LANGDON.**

Kemp, James O.....Machinery.

**LE ROY.**

Allen, J. D.....Machinery.

**LE SUEUR.**

King, H. H.....Mfr. Plows.

**LEWISTON.**

Sidon, A. F. &amp; Co.....Machinery.

**LITCHFIELD.**

Anderson, A. J. &amp; Co.....Machinists.

Swanson, N.....Machinery.

**McCAULEYVILLE.**

Cleland, W. M.....Machinist.

**MANKATO.**

Boegen, F.....Machinist.

Chilson Bros.....Boiler Makers.

Dauber, J. &amp; Co.....Mfrs. Plows.

Mankato Mfg. Co.....Mfrs. Plows.

North Star Plow Works.....Mfrs. Plows.

Wickersham &amp; Brown.....Plumbers.

**MARINE MILLS.**

Rose &amp; Magnuson.....Machinery.

**MINNEAPOLIS.****MACHINISTS.**

Bell, Vernon.....

Bryant, Geo. M.....Hashow, Maish &amp; Davis.

Butler, H. C.....Malmsten, Nelson &amp; Co.

Crocker &amp; Pell.....Paul, J. H.

Douglas, Hall &amp; Roden.....Penny, Isaac L.

Fitzgerald, J. P.,.....Perkins, Geo. F. &amp; Co.

Fruen, W. H.....Pray, O. A. Mfg. Co.

.....Strothman Bros.

.....White, E. A.

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

.....

**MINNEAPOLIS—Continued.**

Fletcher, J. Son & Co.,.....Mill Machinery.  
 Fritsche, E. L.,.....Coppersmith.  
 Glenn & Lusk,.....Boilers, &c  
 Grime, J.,.....Mfr. Toole.  
 Grygia & Selden,.....Sheet Iron Works.  
 Kerrick, J. H. & Co.,.....Machinery.  
 Laraway & King,.....Mfrs. Plows.  
 Lockwood, Upton & Co.,.....Iron Works.  
 Menzel, G. & Co.,.....Iron Founders.  
 Minneapolis Harvester Works,.....Mfrs. Agl. Impts.  
 Monitor Plow Works,.....Mfrs. Plows.  
 North Star Iron Works Co.,.....  
 North Western Stove Works,.....Stove Founders.  
 Peet, R. & Co.,.....Brass Founders.  
 Perrine, C. K.,.....Mfr. Plows.  
 Reid & Johnson,.....Iron Founders.  
 Shatto & Dennis,.....Machinery.  
 Stetson, W. C.,.....Machinery.  
 Towne, H. A.,.....Minneapolis & St. Louis Railway.  
 Wood, Boshart & Co.,.....Copper and Sheet Iron.  
 Young, H. M.,.....Iron Founder.

**MINNEOTA.**

Oakland, H. F.,.....Machinery.

**MINNESOTA FALLS.**

Lette, Geo. L.,.....Machinist.

**MOORHEAD.**

Bruns, H. H.,.....Rail Road Supplies.  
 Butler & Son,.....Iron Founders.  
 Moorhead Foundry.  
 Treet, H. P., & Co.,.....Plumbers.

**MORRIS.**

Stone, A. A.,.....Machinery.

**NEW MARKET.**

Hauer, M.,.....Iron Founder.

**NEW RICHLAND.**

Thompson & Hindman,.....Machinery.

**NEW ULM.**

Erd, Wm.,.....Iron Founder.  
 Kobarsch, Theodore,.....Iron Founder.  
 Leonhard, Chas.,.....Iron Founder.

**NORTHFIELD.**

Carls, S. A.,.....Machinery.  
 Fox & Co.,.....Iron Founders.  
 Van Buskirk Bros.,.....Machinists.

**ORTONVILLE.**

Engquist, A.,.....Mfr. Plows.

**OSAKIS.**

Bolton, Eugene,.....Iron Founder.  
 Pioneer Mfg. Co.,.....Iron Founders.  
 Seavey & Watts,.....Iron Founders.

**OTAWONNA.**

Burdick, C. W.,.....Founder & Machinist.  
 Howe & Co.,.....Founders & Mfrs. Agl. Impts.  
 Peterson, John,.....Machinery.

**PARK RAPIDS.**

Tilet, Edward,.....Iron Founder.

**PLEASANT MOUND.**

Robinson, Wm.,.....Iron Founder.

**RED WING.**

Densmore Bros.,.....Iron Founders.  
 Hastings, J. L.,.....Machinist.  
 Hayes, James,.....Plumber and Gas Fitter.  
 Lorgreen, N.,.....Iron Founder.

**REDWOOD FALLS.**

Merritt, Samuel,.....Founder & Machinist.  
 Tiffany, J. J. & Co.,.....Machinery.

**RICEFORD.**

Sherwood, D. A.,.....Iron Founder.

**ROCHESTER.**

Canady, W. E.,.....Iron Founder.  
 Fox, J. H.,.....Iron Founder.  
 Gaskill & Purvis,.....Founders & Machinists.  
 La Du & King,.....Iron Founders.

**ROCHESTER—Continued.**

Livermore, F. D.,.....Iron Founder.  
 Nelson & Gunderson,.....Mfrs. Plows.  
 Rochester Manufacturing Co.,.....Iron Founders.

**RUSHFORD.**

Rackman, John,.....Machinist.  
 Eggen Bros.,.....Mfrs. Plows.  
 McGregor, Thos. & Co.,.....Machinists.  
 Mahaffy, W. D.,.....Iron Works.  
 Walker, Hiram,.....Machinist.  
 Walker & James,.....Iron Founders.

**ST. CLOUD.**

Rosenberger Mfg. Co.,.....Iron Founders.  
 Stevenson, J. F. & Co.,.....Iron Founders.

**ST. PAUL.****PLUMBERS, STEAM & GAS FITTERS.**

Davis, Thos.,.....Pendergrast Bros.  
 Dempsey, G.,.....Rogers & Davis.  
 Dunningham, J. J.,.....Rugg, H. P.  
 Fox, J. L. & Co.,.....Shea, J. H.  
 Kenney & Hudner,.....Ward, John J.  
 Osborne, E. F.,.....Wilson & Rogers.

**MISCELLANEOUS.**

Adams & Isherwood,.....Iron Founders.  
 Bailey, W. F.,.....Brass Founders.  
 Bailey Mfg. Co.,.....Mfrs. Agl. Impts.  
 Boon, H.,.....Coppersmith.  
 Burkley, Martin,.....Machinist and Boiler Maker.  
 Cleveland Co-operative Stove Co.,.....  
 Depew & Co.,.....Machinists.  
 Freeman, J. G. & Co.,.....Machinery.  
 Johnson, C. W.,.....Chicago, St. Paul, Minneapolis  
 and Omaha Railway.  
 Kahler, Justus,.....Machinist.  
 Kenney Bros.,.....Boiler Makers.  
 Lee, T. A.,.....Machinist.  
 Leyde, F. A.,.....Machinery.  
 McAfee, H. J. & Co.,.....Machinists.  
 McFarland, W.,.....St. Paul & Dul th R.R.  
 Morand, Frank,.....Boiler Maker.  
 Moshofsky, F.,.....Coppersmith.  
 Nichols & Dean,.....Iron.  
 Orme, Henry,.....Iron Founder.  
 Robinson & Carey,.....Machinery.  
 Rothwell, Jos. Jr.,.....Machinist.  
 St. Paul Foundry & Mfg. Co.,.....Engine Builders.  
 St. Paul Harvester Works,.....Mfrs. Agl. Impts.  
 St. Paul Machine Works,.....Machinist.  
 St. Paul Plow Works,.....Mfrs. Plows.  
 St. Paul Rolling Mill Co.,.....  
 Sheldon, S. L.,.....Machinery.  
 Smith, C. C. St. Paul, Minneapolis & Manitoba R.R.  
 Sturm, Luke,.....Sheet Iron & Copper Worker.  
 Walter, Moritz,.....Coppersmith.  
 Wilson & Son,.....Coppersmiths.

**ST. PETER.**

Esler, W. C.,.....Founder and Machinist.  
 Nutter & Heritage,.....Mfrs. Plows.  
 Peterson, J. M.,.....Machinist.

**SAUK CENTRE.**

Dean & Co.,.....Machinery.  
 Mann & Allison,.....Iron Founders.  
 Sauk Valley Mfg. Co.,.....Iron Founders.

**SHAKOPEE.**

McClary, Lanhart & Co.,.....Iron Founders.

**SLEEPY EYE LAKE.**

Wright & Lesenfeld,.....Machinery.

**SPRING VALLEY.**

Cusick, P.,.....Machinery.  
 Hande, K. K.,.....Mfr. Plows.  
 Potter, W. A.,.....Iron Founder.

**STILLWATER.**

Hall, W. B. & Co.,.....Machinery.  
 Kelso, J.,.....Plumber.  
 Quinlan, John,.....Plumber and Gas Fitter.  
 St. Croix Iron Works,.....Iron Founders.  
 Seymour, Sabin & Co.,.....Engine Builders.  
 Swaim, D. M.,.....Iron Founder.  
 Swaim, George,.....Iron Founder.

**TRACY.**

Evans, D. H. .... Machinery.

**WABASHA.**Downer & Porter. .... Iron Founders.  
Wallace, J. .... Boiler Maker.**WACONIA.**

Knoblanck, A. .... Iron Founder.

**WADENA.**

Claton &amp; Watson. .... Mfrs. Plows.

**WALNUT GROVE.**

Goff, F. F. .... Iron Founder.

**WARSAW.**

Bemis, N. .... Iron Founder.

**WATERTOWN.**

Japs Bros. &amp; Barnick. .... Mfrs. Plows.

**WILLMAR.**

Morrissey, J. E. .... Machinist.

**WINDOM.**

Clark, L. .... Machinist.

**WINONA.**Anderson & Norquist. .... Plumbers.  
Baldwin, A. & G. .... Iron Founders.  
Flood & Murphy. .... Plumbers.  
Harburt, W. M. .... Iron Founder & Mfr. Agl. Impls.  
Smith, Bros. .... Brass Founders.  
Toze, Michael. .... Plumber and Gas Fitter.  
Winona Plow Co. .... Mfrs. Plows.**YOUNG AMERICA.**

Thomas, J. H. .... Iron Founder.

**MISSISSIPPI.****BATESVILLE.**

Perkins &amp; Jones. .... Machinists.

**BROOKHAVEN.**

Connelly, Jos. .... Iron Founder.

**BROOKVILLE.**

Harrison &amp; Suttrell. .... Mfrs. Plows.

**COLUMBUS.**Jacob, F. M. .... Machinery.  
Wood, C. R. .... Machinist.**CONCORDIA.**

Walker, Frank. .... Machinist.

**CORINTH.**

Adams &amp; Ketchum. .... Founders &amp; Machinists.

**GRAND GULF.**

Hughes, J. H. .... Machinery.

**GREENVILLE.**Ronan, S. J. .... Machinist.  
Shelton, J. B. .... Georgia Pacific R. R.**HARDY STATION.**

Watson, W. T. .... Machinist.

**JACKSON.**Bustamente, G. D. .... Machinery.  
Kirkland, A. H. .... Machinery.  
McDonnell, John. .... Iron Founder.  
Pearl River Foundry & Agricultural Works.  
Williams, C. W. .... Iron Founder.**MERIDIAN.**Hoffer, W. .... Iron Founder.  
Williams & Briggs. .... Machinists & Founders.**MOSS POINT.**

Hand &amp; Blumer. .... Iron Founders.

**NATCHEZ.**Allan, David. .... Machinery.  
Kennedy, G. & E. .... Coppersmiths.  
McClure, D. .... Machinist.  
Sawyer, C. M. .... Plumber & Gas Fitter.**RIPLEY.**

Phelps, W. H. .... Ship Island, Ripley &amp; Kentucky R. R.

**STORMSVILLE.**

Loomis, Samuel. .... Machinist.

**TCHULA.**

Cress, D. N. .... Machinist.

**THYATIRA.**

Wall, W. H. .... Machinist.

**VICKSBURG.**Barry, John & Co. .... Gas Fitters.  
Foley, P. J. .... Boiler Maker.  
Fox, Adam. .... Boiler Maker & Founder.  
Mulligan, John J. .... Iron, &c.  
Paxton, A. M. & Co. .... Iron Founders.**WATER VALLEY.**Shaw, C. P. .... Mfr. Plows.  
Shaw, J. M., Sr., & Son. .... Iron Founders.**WINONA.**

Applegate, G. S. .... Machinery.

**WOODVILLE.**Brower, R. C. .... Machinist.  
Tilton, J. A. .... West Feliciana R. R.**MISSOURI.****ALBANY.**Gilbert, Chas. .... Iron Founder.  
Watson, Fred. .... Iron Founder.**ASHLEY.**

Elmore, H. E. &amp; T. J. .... Machinist.

**BOONVILLE.**Miller, Chas. .... Machinist.  
Weber, G. J. .... Machinist.**BOWLING GREEN.**

Pugh, A. J. .... Mfr. Plows.

**BROWNSVILLE.**

Wheeler, J. A. &amp; Co. .... Mfrs. Agl. Impls.

**CAHOKA.**

Eureka Gun Works

**CAPE GIRARDEAU.**Carter, C. E. .... Cape Girardeau Railway  
Feurth, C. .... Iron Founder.  
Reilly, Phillip. .... Iron.**CARONDELET.**

Haynes, O. A. .... St. Louis, Iron Mountain &amp; Southern R. R.

**CARROLLTON.**Heins Bros. .... Machinists.  
Mettler, L. M. .... Iron Founder.**CARTHAGE.**Carthage Foundry & Machine Co.  
Platt, C. D. .... Mfr. Plows.**CHAMOIIS.**

Miller, J. C. .... Machinist.

**CLARKSVILLE.**

Fletcher, W. A. .... Founder &amp; Machinist.

**CLINTON.**

Hinderer, N. .... Mfr. Plows.

**COLUMBIA.**Broughton & Adams. .... Mfrs. Plows.  
Scrags, T. C. & Co. .... Machinists.**DOWNING.**

Vanaken, W. A. .... Mfr. Plows.

**EDINA.**Miller, P. .... Mfr. Plows.  
Schierbrock, A. .... Machinist.

**FAIRMOUNT.**

Mills, Marvin.....Mfr. Plows.

**FERN RIDGE.**

Schroeder, C. A.....Mfr. Plows.

**FREDERICKTOWN.**

Madison Co. Co-operative Co.....Mfrs. Plows.

**GLENWOOD.**

Dunbar Bros.....Founders and Machinists.

Logan, Wm.....Railroad Supplies.

**HANNIBAL.**

Deakin Bessemer Steel &amp; Iron Co.

Holthoff &amp; Creamer.....Boiler Makers.

Long, James.....Hannibal &amp; St. Joseph R. R.

O'Hern &amp; Hayward.....Plumbers &amp; Gas Fitters.

Treat, C. A.....Iron Founder.

Wilson, W. C.....Iron, etc.

**HARTVILLE.**

Elliott, S. S.....Mfr. Plows.

**HAMATITE.**

England &amp; Co.....Machinery.

**HOLDEN.**

Baker, W. P.....Mfr. Agl. Impls.

**HOUSTON.**

Elliott, D. G.....Iron Founder.

**HUNTSVILLE.**

Hicks, Mahlon.....Mfr. Plows.

**INDEPENDENCE.**

Independence Agricultural Works.

Weston, Robert.....Mfr. Plows.

Wirt, R. D. &amp; Co.....Plumbers.

**IRONTON.**

Simerman, A. L.....Iron Founder.

**JACKSON.**

Mack, Chas. H.....Iron Founder.

**JEFFERSON CITY.**

Ambrose, J. S.....Plumber &amp; Gas Fitter.

Dallmeyer, W. Q.....Mfr. Agl. Impls.

**JONESBURG.**

Godfrey, H. M.....Mfr. Plows.

**JOPLIN.**

Harmony, W. S.....Iron Founder.

Joplin Boiler Works.

Leckie, W. W.....Machinist.

Pitcher Lead &amp; Zinc Co.

West Joplin Lead &amp; Zinc Co.

**KANSAS CITY.****PLUMBERS, STEAM AND GAS FITTERS.**

Allen &amp; Ashdown.....Hargraves &amp; Arbuckle.

Ashdown, W. G.....Hornbrook Bros.

Austin, D. &amp; Co.....Loring, E. R.

Cotter, Jas.....Lyons, Jas. S.

Doherty &amp; Everett.....Maxwell, Wm

Donahue, Cornelius P.....Ryle &amp; Ballantine.

Farley, R. B.....Shaw, John.

**MISCELLANEOUS.**

Brockett, C. A. &amp; Co.....Mfrs. Augers.

Buford, B. D. &amp; Co.....Mfrs. Plows.

Clarke, James.....Brass Founder.

Cody, T.....Boiler Maker.

Dalley, J.....Boiler Maker.

Darby &amp; Jameson.....Boiler Makers.

Deere, Man-ur &amp; Co.....Mfrs. Plows.

Delamere, Thomas.....Boiler Maker.

Grand Detour Plow Works.

Kansas City Iron Works.

Kansas City Machinery Co.

Kansas Rolling Mill Co.

Keill, W. B.....Boiler Maker.

Kelley, A. J.....Iron Founder.

Keystone Iron Works Co.

Keysbury, J. W.....Machinist.

King, J. Q. A.....Iron, &amp;c.

McCormick Harvesting Machine Co.

Maedel, C. B.....Machinery.

**KANSAS CITY—Continued.**

Mann &amp; Masters.....Boiler Makers.

Marsh, C. W. &amp; W. W.....Mfrs. Plows.

Martin, H. B.....Iron &amp; Steel.

Mayer &amp; Malone.....Boiler Makers.

Moline Plow Co.....Mfrs. Plows.

Moore, J. A. &amp; Co.....Boiler Makers.

Moore &amp; Moss Foundry Co.

Moss, C. E. &amp; Co.....Car Wheel Founders.

Nordyke Iron &amp; Brass Works.

Novelty Iron Works.....Founders.

Pioneer Iron &amp; Brass Works.

Ruse, W. L.....Brass Worker.

Schultz, A.....Mfr. Tools.

Smith, John.....Galvanized Iron.

Smith &amp; Keating Agricultural Implt. Co.

Sweet, A. K.....Galvanized Iron Works.

Thor Iron Works.

Turnbull &amp; Schult.....Galvanized Iron.

United States Wind Engine &amp; Pump Co.

Weir Plow Co.

Western Brass &amp; Lantern Mfy.

Wilson &amp; Palmer.....Boiler Makers.

Witte, A.....Machinist.

**KIMMSWICK.**

Peckham Iron Co.....Founders.

**KIRKSVILLE.**

Beeman, O. H.....Mfr. Plows.

**LABADDIE STATION.**

Verniard, A.....Machinist.

**LANE'S PRAIRIE.**

Grenikee &amp; Lindner.....Mfrs. Plows.

**LEBANON.**

Bantley &amp; Bro.....Iron, &amp;c.

**LEXINGTON.**

Jordan, W. M.....Iron Founder.

Morrison, Chas. A.....Iron Founder.

**LOUISIANA.**

Freeman, W. C.....Founder &amp; Machinist.

Pribe, Albert.....Iron &amp; Steel.

Whitney, T. F.....Founder &amp; Machinist.

**LOUISVILLE.**

Estes, S. E.....Mfr. Plows.

**MACON.**

Hunkins, E. J.....Founder &amp; Machinist.

Palfrey, F.....Founder &amp; Machinist.

**MALTA BEND.**

Day, John.....Machinist.

Fink, McGlumphy.....Machinist.

**MARYVILLE.**

Armstrong, J. J.....Founder &amp; Machinist.

Wiles &amp; Avery.....Mfrs. Plows.

**MOUNT VERNON.**

Donnell, A. J.....Mfr. Plows.

**NEOSHO.**

Alexander, J. E. &amp; Son.....Mfrs. Plows.

Van Riper &amp; Rogers.....Iron Founders.

**NEW HAVEN.**

Eisman, Louis.....Mfr. Files.

**NEWTON.**Twombly, F. B.....Chicago, Rock Island, & Pacific  
Railway.**PARIS.**

Ashcraft, N. &amp; Co.....Mfrs. Plows.

**PERRY.**

Creamer, G. W.....Machinist.

**PICKERING.**

Kenney, B. W.....Mfr. Plows.

**PIERCE CITY.**

Lehnhard, P. J.....Mfr. Plows.

**RAVENNA.**

Lytlehliter, G. W. .... Mfr. Plows.

**RENICK.**

Hendrix, J. W. .... Mfr. Plows.

**RICH HILL.**

Newton, W. A. .... Iron Founder.

**RICHMOND.**

Pickering, J. &amp; Son. .... Iron Founders.

**ROCHEPORT.**

Roberts, W. .... Mfr. Plows.

**ROLLA.**

Strobach, F. .... Mfr. Plows.

**ST. CHARLES.**

Jennings, L. C. .... Gas Fitter.

**ST. JAMES.**

Deegan, Thos. .... Mfr. Plows.

**ST. JOSEPH.**

Alden, Edward. .... Machinist.

Ambrose, J. W. &amp; Co. .... Founders &amp; Machinists.

Ambrose Mfg. Co. .... Iron Founders.

Baker, Peter. .... Boiler Maker.

Bombeck, D. F. .... Copper &amp; Sheet Iron Works.

Buford, B. D. .... Mfr. Agt. Impls.

Burke, H. C. &amp; Co. .... Machinists.

Champion Machine Co. .... Mfrs. Agt. Impls.

Chase, P. A. .... Kansas City, St. Joseph, &amp; Council Bluffs R. R.

Crowthers &amp; Rodgers. .... Iron Founders.

Herbert, M. E. &amp; Co. .... Plumbers.

Horigan, James. .... Plumber.

Hunter, W. A. .... Iron Works.

McCormick Reaper &amp; Mower Co. .... Mfrs. Reapers and Mowers.

Nichols, Shepard &amp; Co. .... Engine Builders and Mfrs. of Threshing Machines.

Patrick &amp; Fraser. .... Mfrs. Plows.

Perkins, E. &amp; Son. .... Mfrs. Iron Shutters.

Richardson, G. O. .... Machinist.

Rust Well Auger Co. .... Mfrs. Drills &amp; Augers.

Zipp, Geo. H. .... Boiler Maker.

**ST. LOUIS.****AGRICULTURAL IMPLEMENT MANUFACTURERS.**

Cornoyer &amp; Barr. .... 1604 Broadway.

Cronenbold, Chas. .... 1220 S. 3rd.

Deere, Mansur &amp; Co. .... 515 N. Main.

Dowdall, John T. .... 901 N. Main.

Falkenhainer, M. .... 1545 Carondelet Av.

Field, J. A., &amp; Co. .... Howard, cor. 8th.

Furst &amp; Bradley Mfg. Co. .... 916 N. 2nd.

Gibbs &amp; Sterritt Mfg. Co. .... 212 S. 4th.

Hayner, J. E. &amp; Co. .... 943 N. 2nd.

Kingman &amp; Co. .... 417 N. Main.

Kingsland &amp; Ferguson Mfg. Company. .... 823 N. 2nd.

Manny Mfg Co. .... 3rd, cor. Lombard.

Mast, P. P., &amp; Co. .... 811 N. 2nd.

Moline Plow Co. .... 804 N. 2nd.

Oyler, Geo. K. &amp; Co. .... 314 N. 1th.

Saint Louis Farm Machinery Co. .... 1107 Clark Av.

Sempie &amp; Birge Mfg. Co. .... 1024 N. Main.

Beymour Mfg. Co. .... 1024 N. Main.

Whitman Agricultural Co. .... 8th, cor. Clark Av.

**BOILER MAKERS.**

Garstang, Richard. .... 1245 S. 2nd.

Lunday, Chas. H. .... 1827 N. 10th.

McGrath, Dennis. .... 1219 N. Main.

O'Brien, Chas. .... 904 N. Main.

O'Brien, John. .... 1135 N. Main.

Rohan Bros. Boiler Mfg Co. .... 1104 Collins.

Wangler, Joseph F. .... 1019 N. Main.

Western Iron Boat Building Co. .... Dock Sta. S. St. Louis.

**BRASS FOUNDERS.**

Bloemker, Henry. .... 14 Myrtle.

Chamberlain, O. P. .... 149 Rankin Av.

Cousins, Jones &amp; Forbes. .... 17 South.

Fries, L. F., &amp; Son. .... 806 S. 2nd.

Gaertner, X. .... 508 S. 2nd.

**ST. LOUIS—Continued.**

Gillespie &amp; Egli. .... 811 N. 2nd.

Gregg, Leonard. .... 12 Spruce.

Harpe &amp; Dauernheim. .... 317 N. 3rd.

Kupferle Bros. .... 600 N. 2nd.

Kupferle &amp; Boisselier. .... 806 N. 2nd.

Mayer, E. C. .... 1437 Carondelet Av.

Messmer, F. .... 210 S. 3rd.

More, Jones &amp; Co. .... 1604 N. 8th.

Nelson, N. O., &amp; Co. .... 8th, cor. St. Charles.

Owen, Hunt. .... 7 Morgan.

Rumsey, L. M., Mfg. Co. .... 806 N. 2nd.

Ruppenthal, J. .... Cor. Main &amp; Exchange.

Stuckstede, J. G., &amp; Bro. .... 1312 Columbus St.

**IRON FOUNDERS.**

American Stove Mfg. Co. .... 510 Locust.

Atlas Engine Works. .... 709 N. Main.

Bridge &amp; Beach Mfg. Co. .... 526 N. Main.

Buck Stove Co. .... 720 N. Main.

Christopher, Simpson &amp; Co. .... Park Av., cor. 9th.

Cleveland Co-operative Stove Co. .... 2900 N. 11th.

Curtis, M. &amp; E. C. .... 706 Olive.

Evers Stove Mfg. Co. .... 1821 N. 2nd.

Excelsior Foundry &amp; Plating Co. .... 113 S. 8th.

Excelsior Mfg. Co. .... 512 N. Main.

Foree, E. D. .... 605 S. 6th.

Fritz, Geo. J. .... 2014 Jackson.

Fulton Iron Works. .... 2nd, cor. Carr.

Gage &amp; Horton Mfg. Co. .... 701 N. Main.

Gerst Bros. Mfg. Co. .... 800 Cass Av.

Kingsland &amp; Ferguson Mfg. Co. .... 823 N. 2nd.

Laclede Foundry. .... 936 N. 2nd.

Marshall, W. D., &amp; Co. .... Main, cor. Mullamphy.

Missouri Car &amp; Foundry Co. .... 120 N. 4th.

Missouri Stove Foundry. .... 2nd, cor. Palm.

Mound City Stove Works. .... 1111 Cass Av.

Pattis Bros. .... 7th, 8th &amp; Hickory.

St. Louis Iron &amp; Machine Works. .... Main, cor. Chouteau Av.

St. Louis Malleable Iron Co. .... 2116 Market.

Scherpe, Koken &amp; Graydon. .... 8th, cor. Park Av.

Shickel, Harrison &amp; Howard Iron Co. .... 12th, nr. Papin.

Southern Stove Works. .... 1015 Herbert.

South St. Louis Foundry. .... Steins, cor. Water.

Spangenberg, E., Foundry Co. .... 2503 W. 18th.

Standard Foundry Co. .... 1240 Collins.

Western Stove Mfg. Co. .... 406 N. Main.

**IRON AND STEEL DEALERS.**

Beck &amp; Corbitt Iron Co. .... 294 N. 2nd.

Bonner &amp; Zoller Iron Co. .... 912 N. Main.

Chouteau, Harrison &amp; Valle Iron Co. .... 939 N. 2nd.

Ewald Iron Co. .... 801 N. 2nd.

Garrison, D. E. .... 221 Olive.

Graff, Bennett &amp; Co. .... 938 N. 2nd.

Paddock Hawley Iron Co. .... 906 N. Main.

Pope Iron and Metal Co. .... Gratiot, cor. 14th.

Richmond Iron &amp; Steel Works. .... 100 N. 4th.

Ripley &amp; Kimball. .... 907 N. Main.

Sligo Iron Store Co. .... 945 N. 2nd.

Southerns, E. E. &amp; Bro. .... 922 N. 2nd.

Townley, C. H., &amp; Co. .... 709 N. 2nd.

Waterman, Campbell &amp; Co. .... 809 N. Main.

Wolfe &amp; Good. .... 115 Washington Av.

Woltman &amp; Mickarts. .... 5 N. 2nd.

**MACHINERY DEALERS.**

Brown, David N., Machinery Co. .... 1011 N. Main.

Fay, J. A., &amp; Co. .... 720 N. 2nd.

Fisher, Chas. B. .... 1010 N. Main.

Hall &amp; Brown. .... 1859 Broadway.

Hill, Clarke &amp; Co. .... 800 N. 2nd.

Moxey, Geo. .... 13 Morgan.

Nel-on, N. O., &amp; Co. .... 8th, cor. St. Charles.

Petticler, A. S., Machinery Co. .... 924 N. Main.

Rein-tedter, H. .... 1124 Broadway.

Smith, Beggs &amp; Ranken Machine Co. .... 800 N. Main.

Werner, H. G. &amp; Co. .... 807 N. 2nd.

**MACHINISTS.**

Ackerman, A. J. &amp; Co. .... 217 Exchange.

Atlas Engine Works. .... 709 N. Main.

Baler &amp; Mulcher. .... 802 S. 5th.

Basse, Philip. .... 1346 S. 2nd.

Bignell &amp; Keeler Mfg. Co. .... 908 N. Main.

Botsford, C. H. .... 1424 Washington Av.

Boyer, Joseph. .... 312 Bates.



## ST. LOUIS—Continued.

Brecht, G. V.	1205 Cass Av.
Brown, David N. Machinery Co.	1011 N. Main.
Creselius, L. J. & Bro.	2113 Carondelet Av.
Dehner, Adolf & Co.	1234 S. 7th.
Devlin, Daniel.	319 Almond.
Ellison, Wm. & Son.	313 N. Main.
Eves, W.	3029 Broadway.
Felber, George.	317 Mulberry.
Forman & Sellers.	1417 N. 2nd.
Fritz, Geo. J.	1014 Jackson.
Fritz, John F. & Co.	211 Chouteau Av.
Griesche, Gustav.	411 S. 12th.
Hall & Brown.	1859 Broadway.
Halteman, I. Q. & Co.	1611 S. 3rd.
Hunt, A. J.	7 N. 3rd.
Hurzig, Robert.	905 N. 2nd.
Kracker, Otto & Co.	928 N. Main.
La Berge, O. A.	1902 Walnut.
Manny Mfg Co.	819 S. 3rd.
Mielenz & Bartelson.	211 Chestnut.
National Mfg. Co.	11th cor. Clark Av.
Philippi, F.	308 Market.
Priest, Geo. A.	107 Market.
Ramming, John.	1315 Park Av.
St. Louis Iron & Machine Works, Main cor. Chouteau Av.	
St. Louis Malleable Iron Co.	2116 Market.
South St. Louis Foundry.	Steins cor. Water.
Stewart, M. & Bro.	1218 Mallinckrodt.
Stupp, George.	2121 Carondelet Av.
Turner, W. C.	2022 Walnut.
Voita & Dworak.	940 N. 8th.
Weichmann F.	916 S. 2nd.
Westlake & Button Novelty Works Co.	1213 N. Main.
Willome, Jacob.	7111 S. Main.

## PLUMBERS, STEAM AND GAS FITTERS.

Abel, Frederick & Co.	812 N. 5th.
Arnold, John A. J.	2250 Carondelet Av.
Biggs, A. & Co.	713 Pine.
Blackie, Stephen.	706 Washington.
Bohlinger, G. A.	207 S. 3rd.
Caffrey, Thos. P.	2722 Franklin Av.
Callahan, P. H.	703 Pine.
Callahan, Thomas F.	3331 Olive.
Cantwell, Thomas.	1004 Olive.
Carroll, Chas. H. F.	1840 Park Av.
Coker, J. & Sons.	1530 S. 12th.
Collins, David J.	611 N. 7th.
Conroy, J. J.	2727 Carolina.
Doud, T. J. & Co.	213 Washington Av.
Dre-sing, John H.	212 Chestnut.
Eckhardt, Geo. F.	721 Chouteau Av.
Emig, Henry C.	3027 Broadway.
Finger, F. R.	1109 N. 13th.
Fitzgerald, Thos.	1719 Lucas Av.
Gahl, Henry.	1004 Park Av.
Gallagher, J. P. & Co.	1137 N. 5th.
Gavin, Michael D.	3 N. 23rd.
Geekie, John.	1104 Market.
Gellert, Ernst.	1510 Menard.
Gillies, Peter.	808 St. Charles.
Graham, W. H.	2602 Washington.
Graham & Peters.	621 Locust.
Harrington, Patrick L.	518 Chouteau Av.
Henderson, Geo.	1100 Olive.
Hennesy, M. J.	2220 O'Fallon.
Hennesy, Thos. J.	204 N. 8th.
Herring, F. L.	1303 Franklin Av.
Hilpisch & Broderick.	1113 Cass Av.
Jackson, H. J. & Co.	419 N. 3rd.
Kaiser, Julius.	1414 Garrison Av.
Kelly & Conran.	203 S. Main.
Killren, Thos. H.	4 S. Jefferson Av.
Klink, Cha. J.	609 Rutger.
Krage, Henry.	1921 Carondelet Av.
Kuhns, W. H.	1602 Chouteau Av.
Lambe, W. F. & Co.	805 Market.
Langenberg, Frederick.	2334 Olive.
Longergan, E.	1508 Park Av.
Longhotti, A. J.	1121 Olive.
Lorenzen, Julius F.	1209 S. 6th.
Luther, Gustav.	1225 S. 6th.
Lynch, J. A.	618 N. 11th.
Lyons, John.	409 Morgan.
McCann, Peter J.	6 S. 3rd.

## ST. LOUIS—Continued.

McCartin, James.	318 N. 6th.
McLaughlin, Terrence.	7019 S. Main.
McMahon, John.	419 N. 7th.
McMahon, T. H. & Co.	704 N. 7th.
Madden, Patrick & Co.	1235 Olive.
Mahoney, James.	203 S. Main.
Maloney, John P.	Garrison & Eastern Aves.
Manchester, John.	1211 Olive.
Mason, T. K. C.	2604 Laclede Av.
Matthews, Chas. D.	2646 Franklin Av.
Maudsley & Mephram.	113 N. 6th.
Moore, A. R. & Co.	23 S. 14th.
Morris & Co-tello.	2807 Wash.
Murphy, Thos M., & Co.	3329 N. 10th.
Norris & Bro.	910 Pine.
Otto, Ferdinand.	1521 Carondelet Av.
Owen, Hunt.	7 Morgan.
Phillips, Thomas & Co.	2832 Penrose.
Quinn, John, & Co.	306 N. 8th.
Renner, George.	317 Walnut.
Rhump, Henry.	1430 Dodier.
Ring, Philip C.	206 Chestnut.
Roden, David.	800 Chestnut.
Ryan, Martin.	2625 Franklin Av.
Schmitt & Co.	3400 Washington Av.
Schwehr, W. & Co.	706 Franklin Av.
Sheehan, Jeremiah.	1017 Washington Av.
Siegel A., & Co.	215 N. 5th.
Smith, August.	404 Myrtle.
Snyder, H. M.	112 N. 12th.
Sommerrmann, Henry.	St. Ferdinand, nr. Prairie Av.
Sorns, Valentine.	306 Walnut.
Stodger, J. A.	849 N. 10th.
Sullivan, T. W.	611 Market.
Thierry, Columbus.	1519 Market.
Thierry, Edward, & Co.	1410 Market.
Tuffy, Thomas.	19 N. 9th.
Tumulty, Eugene.	316 N. 8th.
Ward, Martin J.	1704 Broadway.
Webster, J. S.	809 St. Charles.
Wehmeyer, O., & Bro.	1308 Franklin Av.
Werner, Geo.	814 N. 6th.
Werner, W., & Bro.	633 S. 4th.
Wilke, A. J.	1811 N. 9th.
Wolff & Ratican.	804 Pine.
Zausch, E. C.	3729 Page St.

## RAILROAD SUPPLIES.

Adams, I. R., & Co.	109 N. 3rd.
Alexander, John G.	118 N. Third.
Beland Track Drill Co.	713 N. 2nd.
Buck, M. M., & Co.	29 N. 3rd.
Cuddy, W. S.	307 N. 3rd.
Fox, Corby & Co.	314 N. 3rd.
Garrison, Daniel E.	221 Olive.
Linsley, E. H.	714 N. 2nd.
St. Louis Railway Supply Co.	801 N. Main.
Warner, Andrew.	713 N. 2nd.

## MISCELLANEOUS.

Aufrechtig, Alois, ....Copper & Sheet Iron Works.	121 Almond.
Bannon, J. F.	Copper & Sheet Iron Worker, 1020 Clark Av.
Bargman, L., Mfr. Safes.	17 N. 2nd.
Beard & Bro. Safe & Lock Co.	918 N. 2nd.
Becannon, C., & Co. Gas Fixtures.	1013 Olive.
Boefer, Wm., Mfr. Tools.	4. 17th, nr. Clark Av.
Boecker, Chas., Mfr. Safes.	9 N. 3rd.
Bonecum, John E., Copper-smith.	309 S. 5th.
Branch, Crookes & Co., Mfrs. Saws, 3004 Broadway.	
Brownell & Wright Car Co., Mfrs. Cars.	2300 Broadway.
Burman, A., & Co., Mfrs. Files.	1114 Cass Av.
Burroughs, E., Pattern Maker.	613 Chestnut.
Campbell, F. M. & Co., Galvanized Iron Works.	1015 Washington Av.
Cochran & Kamerer, Galvanized Iron Works.	815 N. 6th.
Curtis & Co. Mfg. Co., Mfrs. Saws.	811 N. 2nd.
Duggan & Parker Hardware Mfg. Co.	812 S. 12th.
Dunlevy, A. C., Copper & Sheet Iron Works.	513 N. Levee.
Edgar, S. C., Zinc Works.	Randolph, cor. Water.
Emery, J., Model Maker.	918 N. 21st.
Fairbanks & Co., Mfrs. Scales.	302 Market.
Fay Gas Fixture Co.	500 Washington Av.

**ST. LOUIS—Continued.**

Geyer, Henry, Mfr. Iron Railings.....1011 N. 11th.  
 Godin, John, Steam Pipe Works.....924 Washing-  
 ton Av.  
 Green's Car Wheel Mfg. Co.....3018 Broadway.  
 Guerdan, F., Mfr. Iron Railings.....829 S. 7th.  
 Hagan, C., & Son, Mfrs. Hinges.....1301 S. 2nd.  
 Halliday, G. V., & Co., Mfrs. Safes.....609 N. 3rd.  
 Halpin, James, Millwright.....1115 N. 8th.  
 Halteman, I. Q., & Co., Millwrights.....1611 S. 3rd.  
 Hampshire & Hotchkiss, Pattern Mfrs., 312 Bates.  
 Hazzard, Ambrose, Coppersmith.....9 Morgan.  
 Helmtacher Forge & Rolling Mills Co.....Colum-  
 bus, cor. Lamie.  
 Hewitt, John.....Missouri, Kansas & Texas R. R.  
 Hill, Clarke & Co., Machinists' Supplies, 800 N. 2d.  
 Hock, Louis, Mfr. Files.....217 S. 2nd.  
 Holmes, L. L., & Co., Pattern Makers, 319 Almond.  
 Hooker & Stockman, Fire Engine & Pump Works,  
 823 N. 2nd.  
 Hoyt Metal Co., Mfrs. Babbitt Metal, 2nd, cor. Carr.  
 Huber, Chas., Millwright.....416 Chamber of Com-  
 merce.  
 Hulbert & Gould, Mfrs. Iron Fence.....1201 Cass Av.  
 Indiana Car Co., Mfrs. Cars.....120 N. 4th.  
 Kerwin, Daniel, Mfr. Bolts.....806 N. Levee.  
 Krein Franz Mfg. Co., Mfrs. Chains.....900 Howard.  
 Leisse & Hergert, Coppersmiths.....728 S. 5th.  
 Lewis Iron Co., Mfrs. Iron.....217 Olive.  
 Lord, Simeon, Pattern Maker.....811 N. 2nd.  
 McDonald, A., & Bro., Rolling Mill.....Main, cor.  
 Miller.  
 McMurray & Judge, Architectural Iron Works.....  
 913 Chestnut.  
 Mast, Foor & Co., Mfrs. Iron Turbine Wind En-  
 gines, 811 N. Main.  
 Medart, Frederick, Pattern Maker.....105 S. 7th.  
 Meier Iron Co., Mfrs. Iron.....214 Pine.  
 Mecker & Bro. Galvanized Iron Wks.....1119 Olive.  
 Midland Blast Furnace Co., Mfrs. Iron.....411 Olive.  
 Moran Bolt & Nut Mfg. Co.....1525 N. Main.  
 Mound File Works.....1419 Broadway.  
 Mutschler & Eszmuller, Millwrights.....2203  
 Carondelet Av.  
 Nickamp & Baker, Mfrs. Files.....2100 Broadway.  
 Nixdorf, Chas. E., Mfr. Chains.....Main, cor.  
 Brooklyn.  
 Nova Scotia Iron Co., Mfrs. Iron.....11 S. 3rd.  
 Osterhorn Robert, Millwright.....121 Florida.  
 Park Bros. & Co., Mfrs. Steel.....953 N. 2nd.  
 Pearson, A. B., & Co., Mfrs. Scales.....411 Morgan.  
 Prescott, G. W.....Texas & St. Louis R. R.  
 Fringle, R. M.....St. Louis & Cairo R. R.  
 Rammelkamp, R. W., Mfr. Iron Railings.....2810 N.  
 14th.  
 Roessner, Hy., Coppersmith.....1311 S. 5th.  
 Roth, Benj., Mfr. Tools.....Market, cor. 18th.  
 Rumsey & Sikemeier...Plumbers & Steam Fitters'  
 Supplies, 715 N. 2nd.  
 St. Louis Bolt & Iron Co.....509 N. 3rd.  
 St. Louis Car Wheel Co.....Poplar, nr. 17th.  
 St. Louis Hot Pressed Nut & Bolt Mfg Co.....211  
 Biddle.  
 St. Louis Millwright Assn.....311 Convent.  
 St. Louis Ore & Steel Co., Mfrs. Steel.....409 N. 6th.  
 St. Louis Steam Forge & Novelty Iron Works.....404  
 S. Levee.  
 St. Louis Vise & Tool Co.....1424 N. 10th.  
 Sanderson D. & Son, Coppersmiths.....218 Locust.  
 Schrick, August, Mfr. Tools.....831 N. 8th.  
 Schueddig, F., Mfr. Tools.....1307 S. 3rd.  
 Seibel, Conrad, Copper & Sheet Iron Works.....810  
 S. 2nd.  
 Siebel, Rudolph, Mfr. Iron Railings.....2504 N. 16th.  
 Semple, Valle & Burchard Cutlery Co., 514 Locust.  
 Seibel, A. & Co., Gas Fixtures.....215 N. 5th.  
 Standard Tool Co., Mfrs. Tools.....409 Souldard.  
 Stegeman, John, Mfr. Tools.....1601 E. 18th.  
 Strawbridge, David, Pattern Maker.....411 Morgan.  
 Stutz, Louis, Mfr. Iron Railings.....118 Market.  
 Sweeney, James, Coppersmith.....613 Main.  
 Thorn, W. M. & Co., Pattern Makers.....1114 Cass Av.  
 Turner, W. C., Millwright.....2022 Walnut.  
 Ward & Brady, Machinists' Supplies, 517 N. Levee.  
 Waslauck, Theodore, Mfr. Safes.....212 E. 2 d.  
 Watkins, Wm., Millwright.....940 N. Main.  
 Weimann, Henry, Mfr. Files.....2107 De Kalb.

**ST. LOUIS—Continued.**

Western Iron Boat Building Co...Dock Sta., South  
 St. Louis.  
 Williams, J. W. & Co., Mfrs. Tools.....1103 N. Main.  
**SAVANNAH.**  
 Morris, M. S.....Mfr. Plows.  
**SCHELL CITY.**  
 Herrick, B. F.....Machinist.  
**SEDALIA.**  
 Antes, J. F.....Plumber.  
 Barley Bros. & Co.....Mfrs. Agl. Impls.  
 Grace & Kane.....Boiler Makers.  
 Rippey, John.....Plumber.  
 Sedalia Foundry Co.  
 Smith, D. H.....Iron.  
 Wells & Jakeman.....Machinists.

**SHAWNEETOWN.**

Dietrich, C. A.....Machinist.

**SPRINGFIELD.**

Dansley, C. W. & Co.....Steam & Gas Fitters.  
 Dow, H. O. & Co.....Mfrs. Agl. Impls.  
 Queen City Plow Co.  
 Springfield Foundry & Machine Co.

**STEELVILLE.**

Everson, Thos.....St. Louis, Salem, & Little  
 Rock R. R.

**SULLIVAN STATION.**

Shatz, P.....Machinery.

**VERSAILLES.**

Damph, Phillip.....Machinery.

**WARRENSBURG.**

Urie & Co.....Founders & Machinists.

**WASHINGTON.**

Bergner, Geo.....Machinist.

**WAVERLY.**

Landrum & Bro.....Car Mfrs.

**WELLINGTON**

Lockart, J. A.....Mfr. Plows.

**WENTZVILLE.**

Michel, Fritz.....Mfr. Plows.

**WESTON.**

Mauch, John & Son.....Machinists.

**MONTANA.****BUTTE CITY.**

Belmore, J.....Boiler Works.  
 Bower, W. H. H.....Machinery.  
 Renshaw, James.....Mining Machinery.  
 Reynolds, E. D.....Machinery.  
 Tuttle, Esson & Co.....Iron Founders.

**HELENA.**

Davis & Tatum.....Iron Founders.  
 Stedman, John.....Machinist.

**VIRGINIA CITY.**

Spencer, Jno. A.....Machinery.

**NEBRASKA.****ASHLAND.**

Marcy & Butler.....Machinists.

**BEATRICE.**

Boyd, E. T.....Iron Founder.

**BLAIR.**

Sharpneck & Majors.....Iron Founders.

**CENTREVILLE.**

Lindner, Gottfried.....Mfr. Agl. Impls.

**COLUMBUS.**

Krause & Lubka.....Machinists.  
Schroeder, Chas.....Founder & Machinist.

**CRETE.**

Lanahan, John.....Iron Founder.  
McArgar, Hugh.....Mac' inist.  
Prochaska, Vincent.....Iron Founder.  
Thier, O. G.....Machinist.

**FAIRMONT.**

Martin, E. L.....Machinist.

**FREMONT.**

Long, Chas.....Founder & Machinist.  
Sang & Newlean.....Founders & Machinists.

**GRAND ISLAND.**

Hooper, E.....Iron Founder.  
Lykke, C. E.....Machinist.  
McAllister & McCombs.....Machinists.

**HASTINGS.**

Lewis, M. K. & Co.....Founders & Machinists.

**HARVARD.**

Richards, Jas.....Machinist.

**J. LINCOLN.**

Ashton, W. M.....Plumber & Gas Fitter.  
Barnes, A. G.....Plumber & Gas Fitter.  
Franklin, L.....ron Founder.  
Hooker, R., & Sons.....Plumbers.  
May & Cooper.....Gas Fitters.  
Nicol, Andrew.....Plumber & Gas Fitter.  
Perkins, J. R.....Steam & Gas Fitter.  
Roberts, J.....Machinist.  
Seaton, John.....Iron Founder.  
Smith, R. L.....Machinist.

**NEBRASKA CITY.**

Deffebaugh, Lawrence.....Gas Fitter.  
Johnson & Eccleson.....Mfrs. Iron Fence.  
Nebraska City Mfg. Co.....Mfrs. Agl. Impls.  
Taylor, J. M.....Gas Fitter.  
Wale, John & Co.....Machinists.  
Wisner, Miller & Co.....Mfrs. Plows.

**NORTH PLATTE.**

Belton, Jas.....Iron Works.

**OMAHA.**

Andean & Valian.....Mfrs. Safes.  
Boehl, W.....Machinist.  
Broatch, W. J.....Iron.  
Davis, E. P.....Machinist.  
Dolan & Langworthy.....Iron.  
Fitzpatrick, D.....Plumber & Steam Fitter.  
Godfrey, Chas. H.....Machinist.  
Hamilton, McEwan & Co.....Plumbers.  
Hammond, J. F.....Machinist.  
Hartigan, M. W.....Boiler Maker.  
Hogan, P. S.....Boiler Maker.  
McLeod, W. G. & Co.....Plumbers.  
Omaha Foundry & Machine Co.....Mfrs. Agl. Impls.  
Omaha Implement Co.....Mfrs. Agl. Impls.  
Omaha Iron & Nail Co.....  
Price, T. H.....Plumber & Gas Fitter.  
Trevert & Stewart.....Machinists.  
Wearner & Bro.....Iron Founders.  
Woodburn, John.....Plumber.

**PLATTSMOUTH.**

Wayman, John.....Machinist.

**PLUM CREEK.**

Davis & Chabot.....Machinists.

**RED CLOUD.**

Werner & Osborne.....Plumbers.

**SAINT HELENA.**

Borberich, Lorenzo.....Machinist.

**SEWARD.**

Shepland, George.....Iron Founder.

**SOUTH BEND.**

McCormick, Geo.....Machinist.

**TECUMSEH.**

Rockaway, H.....Iron Founder.

**YORK.**

Marshall & Downie.....Iron Founders.

**NEVADA.****CARSON CITY.**

Fording, I. W.....Virginia & Truckee R. R.  
Lindsay, Geo. R.....Lake Tahoe R. R.  
Mills, Richard.....Plumber.

**EUREKA.**

Conklin, H. H. & Co.....Iron Founders.

**GOLD HILL.**

Belmor, G. E.....Boiler Maker.  
McCoue, John.....Iron Founder.  
Taylor, Joseph.....Boiler Maker.  
Wooley, Thomas.....Boiler Maker.

**HAWTHORNE.**

Laws, R. L.....Carson & Colorado R. R.

**MILL CITY.**

Gould & O'Donnell.....Iron Founders.

**MINERAL CITY.**

McCabe, John.....Machinist.

**PALISADE.**

Olsen, S.....Eureka & Palisade R. R.

**RENO.**

Fraser, Andrew.....Iron Founder.  
Quinn, J. J.....Plumber.  
Thompson, J. M.....Gas Fitter.

**TUSCARORA.**

Dove & Jack.....Iron Founders.

**VIRGINIA CITY.**

Brown, J. S.....Plumber.  
Cochran, R.....Plumber.  
Farrell, J. J.....Plumber.  
Hanbridge, Thos.....Plumber & Gas Fitter.  
Peasley, A.....Plumber.  
Union Iron Works.....Iron Founders.

**NEW HAMPSHIRE.****ALSTEAD.**

Brooks, Geo. A.....Mfr. Edge Tools.  
Cooke, Chas. E. & Son.....Iron Founders and  
Machinists.  
Kidder, E. P.....Mfr. Agl. Impls.  
Lufain, Chas. M.....Mfr. Plows.

**ANDOVER.**

Baker, Carr & Co.....Machinists.  
Baker, Joseph.....Machinist.

**ANTRIM.**

Goodell Co.....Mfr. Agl. Impls.

**ASHLAND.**

Shepard & Fletcher.....Iron & c.

**BARNSTEAD.**

Barnstead Machine Corporation.....Machinists.

**BATH.**

Crosby, J. R.....Machinist.

**BELMONT.**

Gilman, Chas.....Machinist.

**BENNINGTON.**

Geer, Geo.....Machinist.  
Goodell & Co.....Mfrs. Cutlery.  
Kimball, C. J. & Co.....Mfrs. Cutlery & Edge Tools.

**BOW MILLS.**

Upton, Mark.....Machinist.

**BRADFORD.**

Bates, M. C.....Ironworker.

**BRISTOL.**

McDaniels & Blake.....Machinists.  
 Robie, Geo. A.....Iron Founder & Machinist.  
 Sargent, W. C.....Machinist.

**CANAAN.**

Flint, Edwin.....Machinist.  
 Jones, Nathan.....Mfr. Hammers.

**CANTERBURY.**

Clough, Phillip C.....Mfr. Agri. Impls.

**CENTRE HARBOR.**

Coffin, Jno. T.....Mfr. Edge Tools.

**CHESTERFIELD FACTORY.**

Pierce, Benjamin.....Mfr. Augers.  
 Pierce, Fred'k B.....Mfr. Augers & Bits.

**CLAREMONT.**

Burns, John.....Gas Fitter.  
 Nott, M. A.....Machinist.  
 Richardson, S. Jr.....Mfr. Files.  
 Sullivan Machine Co.....Iron Founders.  
 Tyler, John.....Mfr. Turbine Wheels.

**CLARKSVILLE.**

Richards, R.....Mfr. Edge Tools.

**COLEBROOK.**

Graham & Gilkey.....Iron Founders.  
 Haynes, Aaron B.....Machinist.  
 Spencer, James W.....Machinist.

**CONCORD.**

Allen, D. N.....Steam Fitter.  
 Bateman, M.....Plumber.  
 Bean, A.....Machinist.  
 Blanchard's, Porter Sons.....Mfrs. Agri. Imp'ts.  
 Eves, John.....Plumber.  
 Ford & Kimball.....Iron & Brass Founders.  
 Ford, W. P. & Co.....Iron Founders.  
 Gage, Porter & Co.....Mfrs. Saws.  
 Goodhue, Geo.....Plumber & Gas Fitter.  
 Heath, L. D.....Mfr. Files.  
 Humphrey, Dodge & Smith.....Iron & Steel.  
 Lander, J. N.....Concord R. R.  
 Munns, Jas. A. & Co.....Plumbers & Gas Fitters.  
 Randall, E. H.....Gas & Steam Fitter.  
 Stevens, N. P.....Machinist.  
 Walker & Co.....Iron & Steel.  
 White, Jno. A.....Machinist.  
 Wilson, T. D.....Machinist.  
 Woodman Bros.....Machinists.

**CONTOOCCOOK.**

Kempton, Morrill & Co.....Mfrs. Tools.  
 Wadsworth, A. B.....Machinist.

**CONWAY.**

Clark, F. B.....Machinist.

**CCOS.**

Alger, J. B.....Machinist.

**DERRY.**

Underhill, H. R.....Mfr. Edge Tools.

**DOVER.**

Farnham, M. P.....Brass Founder.  
 Fletcher, G. H.....Mfr. Edge Tools.  
 Foss, D. & Son.....Machinists.  
 Hobbs, D. W. & Co.....Mfrs. Knives.  
 Marston, Chas. E.....Iron & Brass Founder.  
 Perkins W. T.....Gas Fitter.  
 Rundlett, J. H.....Gas Fitter.  
 Smart, Eugene.....Machinist.

**DURHAM.**

Jenkins, Ephraim.....Machinist.

**EAST HAVERHILL.**

Pike, A. F.....Mfr. Agri. Impls.

**EAST JAFFREY.**

Baldwin, James A.....Machinist.  
 Webster, Wilbur.....Mfr. Edge Tools.

**EAST WASHINGTON.**

Proctor, I. D.....Mfr. Rakes.

**EASTON.**

Bartlett, Frank J.....Mfr. Agri. Impls.

**EFFINGHAM.**

Parsons, C. O.....Mfr. Agri. Impls.

**ENFIELD.**

Cummings, D. M.....Machinist.

**EPSOM.**

Holmes, H. A.....Machinist.

**EXETER.**

Carlisle, J. J.....Iron Founder.  
 Exeter Machine Works Boiler Mkr's & Machinists.  
 Folsom, Eben & Co.....Brass Founders.

**FARMINGTON.**

Fiffeld, A. S.....Machinist.  
 Foss, R. B.....Mfr. Agri. Impls.  
 Newell, A. C.....Mfr. Agri. Impls.  
 Parker, D. T.....Mfr. Agri. Impls.

**FISHERVILLE.**

Concord Axle Co.....Iron Founders.  
 Gage, Porter & Co.....Mfrs. Saws.

**FRANKLIN.**

Aiken, Jonas B.....Machinist.  
 Aiken, Walter.....Machinist.  
 Jackman & Flanders.....Machinists.  
 Stevens, Benjamin C.....Machinist.  
 Taylor & Matthews.....Iron Founders.

**FRANKLIN FALLS.**

Aiken, Walter.....Mfr. Screws.  
 Clark & Haynes.....Machinists.  
 Griffen, G. W., & Co.....Mfrs. Saws.  
 Russell & Erwin Mfg. Co.....Mfrs. Screws.

**FREEDOM.**

Parsons, John.....Machinist.

**FREEMONT.**

Robinson, A. J.....Machinist.

**GILFORD.**

Appleton, R. M.....Machinist.

**GILMANTON IRON WORKS.**

Gilman, David.....Machinist.  
 Haynes, William.....Mfr. Rakes.  
 Hussey, J. P.....Mfr. Plows.

**GOFFSTOWN.**

Dewitt, Henry R.....Machinist.

**GOVIC.**

Parker, Riley H.....Machinist.

**GORHAM.**

Fiske, Thomas E.....Machinist.  
 Sewall, James.....Machinist.

**GRAFTON.**

Martin, Darius.....Machinist.

**GREAT FALLS.**

Higley, Eben N.....Machinist.  
 Sommersworth Machine Co.....Boiler Makers, &c.  
 Tibbets & Brother.....Iron and Steel.

**GREENVILLE.**

Davis, Henry A.....Machinist.

**GROTON.**

Kidder, Daniel.....Machinist.

**GROVETON.**

Welch, J. W.....Mfr. Agri. Impls.

**HAMPSTEAD.**

Nichols, Daniel.....Machinist.

**HENNIKER.**

Chandler, William.....Mfr. Edge Tools.  
 Dow, G. W. S.....Mfr. Tools.

**HILL.**

Adams, G. H., & Co.....Machinists.  
 Merrill, Solon D.....Machinist.  
 Woodward, F. R.....Mfr. Edge Tools.

**HILLSBOROUGH.**

McClintock, Theron &amp; Son.....Iron Fdrs. &amp; Machts.

**HILLSBOROUGH BRIDGE.**Grady, H. E.....Machinist.  
Martin, H. R.....Machinist.**HINSDALE.**Holman & Merriman.....Machinists.  
Hunter, C. E.....Mfr. Bolts and Screws.  
Merriman, C. D.....Iron Founder.  
Newhall & Stebbins.....Machinists.  
Wilder, George S.....Mfr. Edge Tools.**HOLLIS.**

Manning, George W.....Mfr. Edge Tools.

**HOOKSETT.**

Peaslee, D. W.....Machinist.

**HOPKINTON.**

Wadsworth, Aug. B.....Machinist.

**HUDSON.**

Walton, Samuel.....Mfr. Files.

**KEENE.**Armstrong, Michael.....Plumber.  
Armstrong, J. F., & Co.....Plumbers.  
Donnelly, James.....Plumber.  
Elliott, J. B.....Mfr. Mowing Machines.  
Ellis, Moses.....Iron Founder.  
Hubbard, H-sro W.....Machinist.  
Humphrey Machine Co.....Machinists & Mfrs.  
Saws.  
Kepple, Daniel D.....Gas Fitter.  
Perry, F. A.....Cheshire R. R.  
Piper, D. B.....Machinist.  
Sanborn, G. F.....Gas & Steam Fitter.**LACONIA.**Abel, Wm. H. & Co.....Mfrs Knitting Machines.  
Baldwin, N. H.....Machinist.  
Diamond, L. S.....Machinist.  
Goffe, T. A.....Machinist.  
Hinch, J.....Mfr. Edge Tools.  
Huse, Warren D.....Machinist.  
Laconia Car Co.....Mfrs. R. R. Cars.  
Moore, Jno. L.....Machinist.  
Rollins, G. S.....Iron & Brass Founder.  
Smith, Arthur V.....Iron Founder.  
Thomas, W. S.....Machinist.  
Wright, G. H.....Machinist.**LAKE VILLAGE.**Adams, R.....Ashuelot R. R.  
Cole Mfg. Co.....Iron Founders & Machinists.  
Crane, J. S. & Co.....Mfrs. Knitting Machines.  
Peaslee, B. F.....Machinist.  
Pepper, W. H.....Machinist.**LANCASTER.**

Thompson, Alex. &amp; Co.....Machinists.

**LEBANON.**Baxter, Chas. M.....Machinist.  
Bridgman, C. F.....Mfr. Scales.  
Buck, Martin.....Woodworking Machinery.  
Cole, S. & Son.....Iron & Brass Founders.  
Emerson Edge Tool Co.....Mfrs. Edge Tools.  
French, John.....Mfr. Agl Impls.  
Graham, P. C.....Founder & Machinist.  
Marston, D. W.....Mfr. Agl. Impls.  
Marston, N. B.....Mfr. Agl. Impls.  
Mascoma Edge Tool Co.....Mfrs. Scythes.  
Purmont, M. V. & Co.....Mfrs. Scythes.  
Stearns, G. W. & M. L.....Mfrs. Agl. Impls.**LISBON.**Cummings, W. H.....Mfr. Tools.  
Richardson, E. B.....Machinist.  
Titus, H. P.....Machinist.**LITTLETON.**Fogg, John.....Mfr. Tools.  
Graham, P. C.....Iron Founder.  
Kilburn, J. & Son.....Iron Founders & Machinists.  
New Hampshire Scythe Co.....Mfrs. Axes & Scythes.  
Wetherill, J. H.....Mfrs. Scythes.**LYMAN.**

Smith, J., &amp; Sons.....Machinists.

**MANCHESTER.****MACHINISTS.**Annon R. G.....Norton, B. F.  
Clark, C. C.....Nutting, Luther M.  
Cleworth, John & Co.....Porter, B. F.  
Cross, Ira.....Smith, J. A. V.  
Forsait, Hiram C.....Stearns, Wm. B.  
Forsait, S. C. & Co.....Vickery, W. H.  
Hutchinson Bros.....White, A. B.  
Leighton, Geo. A.....Wilder, Elihu.  
Manchester Locomotive  
Works.**PLUMBERS, STEAM & GAS FITTERS.**Batchelder, Jas. T.....Lane, Thos. A.  
Donnelly, R. J.....Pike & Heald.  
Dufrain, L. Napoleon.....Thomas, Jno. A.  
Fisk, Henry.....Varney, David B  
Ford, Jno. F.....Whitney, H. S. & Co**MISCELLANEOUS.**Bachelor, James S.....Plumbers' Supplies.  
Burpee, Hamilton & Co.....Mfrs. Edge Tools.  
Daniels & Merrill.....Iron & Steel.  
Dudley, Thos. B. & Co.....Mfrs. Files.  
Fenton, Geo.....Mfr. Files.  
Grant, Frank & Co.....Mfrs. Edge Tools.  
Lowell, A. H.....Iron Founder.  
Manchester Locomotive Works.  
Perkins, Samuel.....Mfr. Files.  
Rodgers, W. C.....Iron & Steel.  
Stokes, Benj. S.....Mfr. Files.  
Varick, Jno. B.....Iron & Steel.  
Varney, David B.....Brass Founder.**MARLBOROUGH.**Hodgkins, C. & Son.....Mfrs. Wood-working  
Machinery & Saws.  
Thurston Mfg. Co.....Mfrs. Screws & Sewing  
Machines.**MARLOW.**

Phelps, Freeman.....Mfr. Agl. Impls.

**MEREDITH.**

American Twist Drill Co.....Machinists.

**MEREDITH VILLAGE.**

Wadleigh Plow Co.

**MERIDEN.**

Cole &amp; French.....Mfrs. Edge Tools.

**MILFORD.**Boynton, Jas. F. & Co.....Mfrs. Stoves.  
Brown, N. H.....Mfr. Plows.  
Patterson, W. N.....Mfr. Plows.  
Powers, Jno. O.....Mfr. Stoves.**MILTON.**Duntley, Ira W.....Mfr. Edge Tools.  
Duntley, Jos. H.....Mfr. Edge Tools.  
Heald, A. & Son.....Mfr. Edge Tools.  
Osgood, Ebenezer.....Machinist.  
Smith, Edwin.....Machinist.**NASHUA.**American Shearer Mfg. Co. Horse Clipping Machs.  
Bell, C. P.....Machinist.  
Crawford, J. J.....Boiler Maker.  
Davis, Geo. W.....Machinist.  
Flathers & Co.....Machinists.  
Gay, Arthur E.....Gas Fitter.  
Jackman, C. B.....Plumber & Gas Fitter.  
Jackman, S. S. & Co.....Gas & Steam Fitters.  
Nashua Co-operative Iron Foundry Co.  
Nashua File Co.....Mfrs. Files.  
Nashua Iron & Steel Co.  
Nashua Lock Co. Mfrs. Locks & Iron & Brass Fdrs.  
Newell, Geo. W. & Co.....Plumbers.  
Otterson, J. P. S. & Co.....Iron Founders.  
Rollins, Geo. A. & Co.....Machinists.  
Saunders, A. H.....Machinist.  
Underhill Edge Tool Co.....Mfrs. Tools.  
Whitney, G. H.....Machinist.  
Williams, Chas.....Iron Founder.

**NEW BOSTON.**

Butterfield, D. N. .... Machinist.  
 Neville, Geo. D. .... Mfr. Edge Tools.  
 Wason, Abraham. .... Mfr. Tools.

**NEW DURHAM.**

Coburn, Franklin W. .... Mfr. Edge Tools.

**NEW IPSWICH.**

Chandler, Geo. W. .... Machinist.  
 Gibson, F. N. .... Machinist.  
 Marshall, E. O. .... Machinist.

**NEW MARKET.**

Hall, Lafayette. .... Machinist.  
 Pinkham, Jas. .... Machinist.  
 Varney, Al. .... Machinist.

**NEWPORT.**

Kimball, S. S. .... Mfr. Agl. Impls.

**NORTH CHICHESTER.**

Fellows, Jno. .... Machinist.

**NORTH HAVERHILL.**

Lewis, W. H. .... Mfr. Agl. Impls.

**NORTH HINSDALE.**

Lamson, L. Birney. .... Machinist.

**NORTH MONROE.**

Paddleford, Frank. .... Machinist.

**NORTH NEWPORT.**

Downs, Geo. .... Mfr. Agl. Impls.  
 Haven, B. F. .... Mfr. Agl. Impls.  
 Page, Nathaniel O. .... Mfr. Agl. Impls.  
 Sibley Scythe Co. .... Mfrs. Scythes.

**NORTH STRATFORD.**

Baldwin, E. Alger. .... Machinist.  
 Pease, D. H. .... Mfr. Knives.

**NORTH WEARE.**

Hanson, Daniel. .... Machinist & Mfr. Edge Tools.

**PEMBROKE.**

Pembroke Mills Machine Shop.

**PETERBOROUGH.**

Felt, Granville P. .... Machinist & Iron Founder.  
 White, S. G. .... Machinist.

**PIERMONT.**

Dodge, C. .... Mfr. Agl. Impls.  
 Gannett, W. H. .... Mfr. Agl. Impls.

**PIKE STATION.**

Pike, A. F. .... Mfr. Scythes.

**PLYMOUTH.**

Tompkinson, J. & R. .... Mfrs. Files.

**PORTSMOUTH.**

Boardman, James. .... Boiler Maker.  
 Cornelius, Jno. A. .... Plumber.  
 Critchley & Walley. .... Machinists.  
 Doyle, W. J. .... Plumber.  
 Mil er & Furber. .... Gas Fitter & Brass Founder.  
 Miller, N. D. & Co. .... Brass Founders.  
 Rider & Cotton. .... Iron.  
 Sweetser, Jno. P. .... Stove Founder.

**POTTER PLACE.**

Long, G. L. .... Mfr. Edge Tools.

**ROCHESTER.**

Clark, Chas. E. .... Machinist.  
 Estes, Jno. & Son. .... Iron Found-ers.  
 Parker R. H. .... Machinist.  
 Soul, Harrison. .... Iron Founder.  
 Tebbetts Bros. .... Iron and Steel.  
 Wallace, F. E. & Co. .... Iron and Steel.

**ROLLINGSFORD.**

Somersworth Machine Co.

**RUMNEY.**

Nutting, T. P. & H. O. .... Mfrs. Agl. Impls'ts.

**SCYTHERVILLE.**

New London Scythe Co. .... Mfrs. Scythes.

**SOUTH HAMPTON.**

Fitts, Geo. W. .... Mfr. Agl. Impl'ts.  
 Noyes, Jacob C. .... Machinist.

**SOUTH KEENE.**

Elliot, J. B. .... Mfr. Mowers and Reapers.

**SOUTH NEWMARKET.**

Fifield, Geo. E. .... Brass Founder and Machinist.  
 Hobbs, W. R. .... Machinist.  
 Swamscott Machine Co.  
 Wiggins, Geo. B. .... Machinist.

**SOUTH SUTTON.**

Cheney, A. R. .... Copper Works.

**SOUTH TAMWORTH.**

Bartlett Bros. .... Mfrs. Rakes.

**SPRINGFIELD.**

Stockert, K. .... Machinist.

**STARK.**

Thompson, Albert. .... Machinist.

**STEWARTSTOWN.**

Parker, E. S. .... Machinist.  
 Tibbitts, Seth. .... Machinist.

**SUNAPEE.**

Alexander & Perkins. .... Mfrs. Agl. Impls.  
 Carnes & Muzzy. .... Mfrs. Edge Tools.  
 Leavenworth, B. M. .... Iron Founder.  
 Long & Sleeper. .... Mfrs. Agl. Impls.  
 Smith, Jno. B. .... Machinist.  
 Turner, Josiah. .... Machinist.

**SUNCOOK.**

Appleton, G. P. .... Machinist.  
 Williston, H. .... Iron Founder.

**TAMWORTH IRON WORKS.**

Varney, Geo. S. .... Machinist.

**TROY.**

Knight, Winthrop. .... Machinist.

**WAKEFIELD.**

Pillsbury, Jno. D. & Son. .... Machinists.

**WHITEFIELD.**

Jones, Wm. T. .... Machinist.

**WILTON.**

Foster, S. K. .... Plumber.  
 Hopkins, Herman. .... Mfr. Agl. Impls'ts.  
 Patterson & Lord. .... Mfrs. Plows.

**NEW JERSEY.****ALLOWAYSTOWN.**

Davis & Son. .... Stove Founders.

**ANNANDALE.**

Annandale Iron Co.

**ARLINGTON.**

Ackerman, Chas. .... Plumber.  
 Beckett & McDonell. .... Machinists.  
 Foster, J. T. & Son. .... Mfrs. Springs.

**ASBURY PARK.**

Fliteroft, Jno. S. & Co. .... Plumbers.  
 White, Uriah. .... Gas Fitter.

**ATLANTIC CITY.**

Conway, Wm. Jr. & Bro. .... Plumbers.  
 Currie & Faith. .... Plumbers.  
 Frewen & Freeman. .... Plumbers.  
 Idler, Chas. .... Plumber.  
 Lane, W. P. .... Gas Fitter.  
 McAnally & Little. .... Plumbers.

**BARNEGAT.**

Grant, D. C. .... Machinist.

**BARTLEYVILLE.**Bartley, Wm. & Son. .... Iron Founders.  
Green, J. C. .... Mfr. Turbine Water Wheels.**BAYONNE CITY.**Carr & Hobson. .... Mfrs. Agl. Impls.  
Moore, Samuel L & Sons. .... Iron Founders.  
O'Neill, W. M. .... Plumber.**BEAVER RUN.**

Jones, J. V. &amp; B. K. .... Iron Founders.

**BEVERLY.**

Craythorn, Robert M. .... Plumber.

**BLOOMFIELD.**Baldwin, A. N. & Son. .... Machinists.  
Daily & Dunigan. .... Iron Founders.  
Hayden, Peter. .... Rolling Mill.  
Moffat, James G. .... Rolling Mill.**BLOOMINGDALE.**

Ryerson, Martin J. .... Iron.

**BOONTON.**Boonton Iron Works.  
Boonton Rolling Mill.  
Booth, Mrs. A. M. .... Mfr. Cutlery.  
Leonard, J. .... Rolling Mill.  
Van Duyn, Simeon. .... Machinist.  
Wharton, Joseph. .... Rolling Mill.**BORDENTOWN.**Brakeley, John. .... Iron.  
Carter, Joseph N. & Son. .... Boiler Makers.  
Enright, James. .... Gas Fitter.  
McPherson, Willard & Co. .... Iron.  
Murphy, Peter. .... Plumber.  
Thompson, Lewis P. .... Machinist.**BOUND BROOK.**

Riley &amp; McCann. .... Plumbers.

**BRIDGETON.**Cox & Sons. .... Machinery & Plumbers' Supplies.  
Cumberland Nail & Iron Co.  
Ferracute Machine Co.  
Lanning, David W. .... Iron Founder.  
Lawrence, Geo. .... Iron.  
Reeves, C. F. & H. .... Plumbers.**BURLINGTON.**Buck, Isaac W. .... Mfr. Stoves.  
Farnier, Chas. P. .... Iron Founder.  
Hepworth, Richd. .... Plumber.  
Irwin, J. H. .... Plumber.  
Larzelere, Frank. .... Plumber.  
McNeal, A. H. .... Iron Founder.  
Morris, T. J. .... Plumber.**CAMDEN.****PLUMBERS, STEAM, AND GAS FITTERS.**Barnett, Thos. .... Harbinger, Wm. A.  
Bryan, Thos. .... Leathwhite, Geo.  
Caloun, Wm. .... Loughfied, W.  
Francis, Henry B. .... Macnichol & Bell.  
Gamble, Wm. H. .... Moore, Chas. M.  
Hammond, Geo. F. .... Wills, R. A.**MISCELLANEOUS.**Blair, J. F. & Co. .... Mfrs. Engine Lathes  
Burns, J. W. & Co. .... Sheet Iron Works.  
Camden Iron Works.  
Camden Tool & Tube Works.  
Cropley, Denni. .... Sheet Iron.  
Derby & Weatherby. .... Machinists.  
Dialogue, John H. .... Iron Ship Builder.  
Ellis, Joseph R. .... Mfr. Plows.  
Frost & Fullerton. .... Machinists.  
Fulmer, A. J. & Co. .... Bras Founders.  
Furbush, M. A. & Son. .... Machinists.  
Gray, J. Hammond. .... Mfr. Screw Machines.  
Hill, Rufus. .... Camden & Atlantic R. R.  
Hollingshead, Chas. F. .... Machinist.**CAMDEN—Continued.**Imlay, Wm. L. .... Mfr. Ore Machinery.  
Jobe, G. W. .... Sheet Iron Worker.  
Johnson & Holt. .... Mfrs. Woolen Machinery.  
Kimble, Martin. .... Sheet Iron Works.  
Klosterman, J. & Bro. .... Sheet Iron Works.  
Passenger R. R. Locomotive Mfg. Co.  
Penn Harr-w Co.  
Reading Iron Works.  
Scott, James B. .... Machinist.  
Sheppard & Fithian. .... Shipsmiths.**CAPE MAY CITY.**

Delmotte &amp; Beukert. .... Plumbers.

**CARLSTADT.**

Gerecke, Aug. .... Mfr. Hdw.

**CEDARVILLE.**

Claypole, David. .... Shipsmith.

**CHESTER.**Chester Iron Co.  
Osborne, Wm. K. .... Machinist.  
Taylor, Wm. J. & Co. .... Iron.**CLAYTON.**

Marshall, Thos. .... Iron Founder.

**DARETOWN.**Cook, Joseph. .... Machinist.  
Cook, Wm. .... Machinist.**DECKERTOWN.**

Little, O. J. .... Iron Founder &amp; Machinist.

**DORCHESTER.**

Shaw &amp; Son. .... Shipsmiths.

**DOVER.**Birch, F. M. .... Boiler Maker.  
Dover Boiler Works.  
Dover Iron Co.  
Morris County Machine & Iron Co.  
Wilson Direct Process Iron Co.**EAST ORANGE.**Blauroc, Saml. .... Plumber.  
Cahill & Mills. .... Plumbers.  
Lang, Francis. .... Plumber.  
Metz, James J. .... Plumber.**EGG HARBOR CITY.**

Wolf, H. E. .... Machinist.

**ELIZABETH.**Bonnell, R. V. .... Plumber.  
Brophy, Geo. F. .... Plumber.  
Brown, E. G. .... Iron Bridges.  
Coyne, J. J. .... Plumber.  
Elizabethport Mfg. Co. .... Iron Founders.  
Elizabethport Shear Works.  
Haskard & Ludey. .... Plumbers.  
Higgins & Morton. .... Plumbers.  
Mecabe, L. C. & Faulks. .... Plumbers.  
New Jersey Car Wheel Co.  
Rath, H. A. .... Plumber.  
Singer Mfg. Co. .... Sewing Machines.  
Spittlehouse, Chas. .... Plumber.  
Strauss, M. N. .... Mfr. Shears.  
Thompson, N. K. .... Plumber.  
Woodcock, Wm. .... Central R. R. of New Jersey.**ELIZABETHPORT.**Eames Petroleum Iron Co. .... Rolling-Mill.  
Moore, Samuel L. .... Iron Founder.  
Munsell, Rella & Co. .... Stove Works.  
Worrall & Co. .... Mfrs. Saws.**ELMER.**Cochran & Surran. .... Machinery.  
Long, Wm. A. .... Machinery.**ENGLEWOOD.**Elmore & Alexander. .... Plumbers.  
Elmore, J. Milton. .... Plumber.  
Rogers, Peter. .... Plumber.**FARMINGDALE.**

Vaun, Wm. H. .... Iron Founder &amp; Machinist.

**FIELDSBORO.**

Carter, Chas. P. & Son.....Iron Founders.  
Thompson, L. P.....Mfr. Engines, &c.

**FLORENCE.**

Wood, R. D. & Co.....Iron Founders.

**FORT LEE.**

Vogel, Chas.....Machinist.

**FREEHOLD.**

Combs & Bowden.....Iron Founders.

**GLASSBORO.**

Carnell, Wm.....Iron Founder.

**GLOUCESTER.**

Gloucester Iron Works.  
Lafferty, Hugh N.....Mfr. Sugar Machinery.  
Rang, Robt. E.....Mfr. Files.  
Smith, Jas. E.....Plumber & Gas Fitter.

**GREENWICH.**

Ayres, Robert.....Machinist.

**HACKENSACK.**

Hartford Duplicate Machine Tool Co.  
Lynch, James.....Plumber.  
Pearce, E. A.....Plumber.

**HACKETTSTOWN.**

Bowers, M. B. Jr.....Iron Founder.  
Bowers, R. Q. & Son.....Iron Founders.

**HAINESPORT.**

Johnson, Mrs. C.....Iron Founder.

**HAMBURG.**

Jones, J. V. & B. K.....Iron Founder.

**HAMILTON SQUARE.**

Blackwell, J. S.....Machinery.

**HARRISON.**

Ballard & Minchin Mfg. Co.....Iron Founders.  
Branegan, Pat'k.....Plumber.  
Greenfield, W. G. & G.....Machinists.  
Imperial Mfg. Co.....Machinists.  
Ohl, Geo. A. & Co.....Machinists.

**HIGH BRIDGE.**

Everett, D. L.....Mfr. Agl. Impl'ts.  
Taylor Iron Works

**HIGHTSTOWN.**

McDonald, Thos. C.....Mfr. Agl. Impl'ts.  
Shangle, Sering & Son.....Iron Founders.

**HOBOKEN.**

Bowes, Thos. & Bros.....Plumbers.  
Coppers, Geo.....Steam & Gas Fitter.  
Ferguson, Wm.....Iron Founder.  
Fischer, Chas.....Plumber.  
Focht, Geo.....Iron Founder.  
Kniffen, J. H.....Plumber.  
Krodel, Alex.....Machinist.  
McLaren, John.....Boiler Maker.  
Manfield & Fagan.....Iron Workers.  
Murphy, Morris.....Plumber.  
Rosenkrantz, E. & Co.....Brass Workers.  
Rudiger, Chas. H.....Plumber.  
Sinclair, G. M.....Plumber and Gas Fitter.  
Smisson, Jno. Jr.....Plumber.  
Smisson, James.....Plumber.

**HOPE.**

Aten & Wolverton.....Iron Founders.  
Howell, Levi J.....Mfr. Horse Rakes.

**JAMESBURG.**

Magee & Buckalew.....Iron Founders.

**JERSEY CITY.****IRON FOUNDERS.**

Cory, Uzal.....ft. Greene St.  
Davenport & Treacy Co.....Grove cor. 11th.  
Gibson & Pinnell.....162 First St.  
Goddard, Thos.....42 Morris St.  
Griffing, A. A.....Morris Canal nr. Com'paw av.

**JERSEY CITY—Continued.**

Hoffman, Peter.....243 Greene  
Jersey City Iron Works.....Warren cor. 1st  
Jersey City Wheel Foundry and Machine Works,  
151 Greene.  
Savery, Jno., Son & Co.....Wayne, cor. Monmouth.  
Simonds Mfg. Co.....65 Steuben.  
Smith, Geo.....Steuben, cor. Warren.  
Vance Iron Foundry Co.....140 Bay.  
Wallis Iron Works.....ft. of Morris.  
Washburn, Hunts & Co.....357 Warren.

**MACHINISTS.**

Casey, John.....123 R. R. Ave.  
Clary, Brown & Co.....42 Hudson.  
Cushing, Nicholas B.....ft. of Morris.  
Davies & Russell.....40 Morris.  
Gannon, Thos.....112 Hudson.  
Garside, Melvin.....51 First.  
Gruber, Jno. P. & Chase.....284 Sherman Ave.  
James, C. R. & Co.....Warren, cor. Steuben.  
Looes, Louis.....292 Newark Ave.  
Maslin, John, & Son.....Bay, cor. Greene.  
Ribon & March.....144 First.  
Smith, T. & Bro.....ft. of Essex.  
Steele & Condict.....74 Pearl.  
Wade, Jno. N.....164 First.  
Weis, Jos., & Co.....21 York.

**PLUMBERS, STEAM & GAS FITTERS.**

Armstrong, Thos. J.....335 Barrow.  
Benson, W. D.....28 Booraew.  
Berg & Granoche.....250 Bergen Ave.  
Blackshaw, Jas. F.....218 Monticello Ave.  
Breher, Philip.....357 Palisade Ave.  
Clements & May.....458 Grove.  
Coghlan, Jno.....227 Hancock Ave.  
Cowper, Wm. P.....371 Com'paw Ave.  
Cox, Thos.....291 Henderson.  
Dickinson, Stewart J., & Bro.....439 Bergen Ave.  
Dickson, W. M.....149 Halladay.  
Donnelly, Arthur A.....297 First.  
Doran, Thomas.....699 Newark Ave.  
Duffy, John J.....317 Grove.  
Farrier & Garretson.....44 Montgomery.  
Gogelien, Wm.....192 Bergen Ave.  
Hanley, P. H.....111 Newark Ave.  
Hekel, Martin.....566 Palisade Ave.  
Hetherington, Samuel.....45 Montgomery.  
Hilchen, E. H.....75 Franklin.  
Irving, Robt., & Son.....183 Montgomery.  
Jacobus, Albert.....42 Ravine Ave.  
Jardine, Albert J.....119 Montgomery.  
Kelaher, Fergus T.....617 Communipaw.  
Lawless, John.....395 Grove.  
Lockwood, Geo. B.....263 Warren.  
McGuigan, Bernard.....829 Newark Ave.  
Maloney, John.....349 Grove.  
Maloney, Matthew T.....12 Coles.  
Martin, Philip E.....187 Montgomery.  
Meyer, Julius.....271 6th.  
Miller, Chas. T.....206 N. Y. Ave.  
Moran, Michael P.....558 Grove.  
Morgan, Chas.....193 South.  
Munzing, Chas.....656 Newark Ave.  
O'Conner, Patrick H.....217 Pacific Ave.  
O'Donovan, Denis.....556 Newark Ave.  
Reineman, C. H.....461 Palisade Ave.  
Riedel, Francis H.....805 Summit Ave.  
Rudiger, Chas. H.....143 Web. ter.  
Savage, Geo.....Jersey Ave. cor. 1st.  
Schnellhardt, Emil.....329 10th.  
Scriven, Thomas.....52 Harrison Ave.  
Walsh, Richard.....173 Manhattan Ave.  
Walsh, Robt.....589 Summit Ave.  
Woodward, Jno. R.....633 Newark Ave.  
Wurth, Francis S.....433 Central Ave.  
Zumbusch, Jos.....218 Whiton.

**MISCELLANEOUS.**

Adirondack Steel Works.....ft. of Warren.  
American Water & Gas Pipe Co.....98 Hudson.  
Ames, Winslow & Co.....Spike & Rivet Works.  
Cor. Steuben & Washington.  
Archer, Edward, Mfr. Iron Railing, 316 Newark  
Ave.  
Birdsall, Jno. H., Boiler Maker,.....38 Hudson.  
Church, A. B., Shipsmith.....ft. Morgan St.



# JERSEY CITY—Continued.

Cliff & Righter, Steel Car Springs, Grant Ave., n. e. Canal.  
 Dubois, Louis B., Mfr. Chain.....Steuben cor. Warren.  
 English, John A., Sheet Iron Worker, 547 Jersey Ave.  
 Gordon, Geo. C., Mfr. Iron Railings.....183 1st.  
 Gregory, Benj., Steel Works.....ft. of Warren.  
 Harris, Wm.....Locomotive Tire Works. Steuben cor. Warren.  
 Hoffman, Peter, Boiler Maker.....243 Greene.  
 Leslie, Hugh, Boiler Maker.....70 Pearl.  
 McLaughlin, Bernard, Boiler Maker.....21 Essex.  
 Mackey & Haynes, Metal Works.....205 Greene.  
 Moseley Iron Bridge & Roofing Co.....55 Hudson.  
 Miller, Thos., Sheet Iron Worker.....183 1st.  
 O'Crowley, J. J., Sheet Iron Worker.....36½ Essex.  
 Parkins, Chas., Brass Founder.....30 R. R. Ave.  
 Patent Water & Gas Pipe Co.....Greene cor. Bay.  
 Potter, R., Mfr. Gas Meters.....35 Morris.  
 Smith Bros. & McWilliam.....Boiler Makers. ft. of Essex.  
 Spaulding, Jennings & Co.....Mfrs. Steel. Grant Ave. cor. Canal.  
 Taylor, Wm., Shipsmith.....203 Warren.  
 Thompson, J. R. & Co., Steel Works, ft. of Warren.  
 Wakefield, Isaac, Sheet Iron Worker.....75 York.  
 Williams, E. A. & Son.....Brass Founders. 107 Plymouth.

# JOHNSONBURGH.

Bowers, Jno.....Iron Founder.

# KINGSTON.

Searles & Dickens.....Machinists.

# LA FAYETTE.

Collver & Huston.....Iron Founders & Machinists.

# LAMBERTVILLE.

Coombs, Thos.....Brass Founder.  
 Pertre, Chas. M.....Plumber & Gas Fitter.  
 Welsh, Ashbel, Jr.....Iron Works.

# LEBANON.

Hoffman, N. W.....Machinist.

# LITTLE FALLS.

Edge, James.....Mfr. Bolts.

# LOCKTOWN.

Fauss, Sam.....Mfr. Agl. Impt's.

# LONG BRANCH.

Adamson, R. C.....Plumber.  
 Barham, J. & Co.....Plumbers & Gas Fitters.  
 Brick, S. R. & Son.....Plumbers.

# MANALAPAN.

Rue, J. Chalmers.....Mfr. Plows.  
 Stokes, S. & Son.....Mfrs. Files.

# MANTUA.

Stratton, J. L.....Iron Founder.

# MARLTON.

Measey, F.....Sheet Iron Worker.

# MASONVILLE.

Gilbert, E & Co.....Iron Founders.

# MATAWAN.

Fountain, Wm. A.....Plumber.

# MAYS LANDING.

Bing, Robert.....Machinist.

# MEDFORD.

Anderson, J. W. & Bro.....Sheet Iron Works.

# MIDDLE VALLEY.

Miller, Robt.....Mfr. Edge Tools.

# MIDDLEVILLE.

Wintermute, E. R. & P. A.....Iron Founders.

# MIDVALE.

McKinnon, Isaac.....Mfr. Edge Tools.

# MILLBURN.

Barnard & Bailey.....Plumbers.

# MILLINGTON.

Nishwitz, F.....Mfr. Harrows.

# MILLVILLE.

Mayhew, Thos. F.....Iron Founder.  
 Meredith, R. W.....Plumber.  
 Wood, R. D. & Co.....Iron Founders.

# MONTCLAIR.

Areson, Wm. H.....Plumber.  
 Kuchler, J. R.....Plumber.  
 Southward, Geo.....Plumber.  
 Ward, Martin.....Plumber.  
 Whalen, Peter.....Plumber.

# MOORESTOWN.

Brock, W. D.....Iron Founder.

# MORRISTOWN.

Day, Searing & Co.....Mfrs. Stoves and Hardware.  
 Pierson, Thos. B.....Plumber.  
 York, Joseph.....Plumber.

# MOUNT HOLLY.

Alcott, T. C. & Son.....Mfrs. Mill Machinery.  
 Alcott, Thos. J.....Iron Founder and Machinist.  
 Lynch, Peter.....Plumber.  
 Risdon, T. H. & Co.....Iron Founders & Machinists.  
 Worrell, Geo. D.....Plumber.  
 Worrell, John.....Plumber.

# MOUNT OLIVE.

Hamley, Jas. Jr.....Machinist.

# MULLICA HILL.

Hoffman & Reese.....Iron Founders.

# NEWARK.

## IRON FOUNDERS.

Ballard & Minchin Mfg. Co.....Johnson cor. Hermon.  
 Barlow, J. H. & Condit.....28 Orange.  
 Barnett, Oscar.....Hamilton cor. McWhorter.  
 Coventry, Wm. & Co.....101 N. J. R. R. Av.  
 Currier, Cyrus & Sons.....17 R. R. Pl.  
 Davis, C. D.....26 McWhorter.  
 Donaldson, James Jr.....Hedenberg Works.  
 Hay, E. C.....9 Alling.  
 McIlravy, Joseph.....9 N. J. R. R. Av.  
 Meeker, S. J.....87 Clay.  
 Newark Iron Works.....Ogden cor. Clay.  
 Stivers, Arnold & Son.....25 Mechanic.  
 Zusi, Edward.....29 Mechanic.

## MACHINISTS.

Almond, D.....Hedenberg Works.  
 Atlas Mfg. Co.....Cross cor. Spring.  
 Blevney, Jno. C.....23 N. J. R. R. Av.  
 Bulkley, H. W. & Co.....326 Ogden.  
 Burroughs, Chas.....19 R. R. Pl.  
 Chase, Edward O.....363 Market.  
 Currier, Cyrus & Sons.....17 R. R. Pl.  
 Davis, A. J. & Co.....69 N. J. R. R. Av.  
 Drake, Mahlon S.....15 Alling.  
 Harrison, R. M.....359 Mulberry.  
 Hawkins, Wm.....52 M. & E. R. R. Av.  
 Hayden, Peter.....50 Mechanic.  
 Hewes & Phillips Machine Works.....Orange cor. Ogden.  
 Imperial Mnf'g. Co.....212 Passaic Ave.  
 Jost, Edmund.....320 Market.  
 Mundy, Joseph S.....22 Prospect.  
 Nash & Smith.....15 Alling.  
 Parker, G. E., & Co.....17 Mechanic.  
 Pool, A. Alexander & Co.....23 N. J. R. R. Ave.  
 Roff, E. W.....137 Balsey.  
 Russell, Robert H.....14 Beaver.  
 Seymour & Whitlock.....43 Lawrence.  
 Sinclair & Kearns.....109 N. J. R. R. Ave.  
 Skinner & Leary.....5 R. R. Pl.  
 Sloan, C. T. & Co.....289 Washington.  
 Stillwell & Pierce.....19 Ward.  
 Tidey, M. B.....Hedenberg Works.  
 Tobin, James L.....15 Alling.  
 Webber, George A.....55 N. J. R. R. Ave.  
 Wright, Lysander, Jr.....9 Alling.

## NEWARK—Continued.

## MANUFGRS. EDGE TOOLS.

Atha & Hughes.....	Foot of Chapel.
Charlton, John.....	Nassau, cor. Sheffield.
Crawford, Aaron.....	67 Plane.
De Groot, Frank A.....	20 Arch.
De Hart, Charles A.....	80 Adams.
Dodge, Blake & Lyons.....	Montclair R. R.
Fuerster, Henry.....	Hedenberg Works.
Gould, Ezra & Eberhardt.....	97 N. J. R. R. Ave.
Hammersfahr, Charles.....	123 Academy.
Harding, James, & Co.....	20 Arch.
Johnson, William.....	Heden erg Works.
Krauter & Co.....	S. 17th, cor 18th Ave.
Lowentroun, P.....	276 Halsey.
Parkhurst & Holt.....	Cross, cor. Spring.
Pas-aic Machine Works.....	Ogden, cor. Pas-aic.
Pool, A. Alexander, & Co.....	25 N. J. R. R. Ave.
Price, Matthias.....	334 Mulberry.
Provost, M. B.....	Hedenberg Works.
Sauerbiers, Julius.....	291 N. J. R. R. Ave.
Schuieman & Hager.....	1 Correl.
Surers & Co.....	Hedenberg Works.
White, Wm.....	1 Correl.
Wichelhaus, F.....	Hedenberg Works.
Widmer, Frank.....	38 Liberty.
Winkler & Hartman.....	White's Building, Correl.

## PLUMBERS, STEAM &amp; GAS FITTERS.

Baker, H. A.....	372 Broad.
Bauman, Geo.....	147 Springfield Ave.
Berla, Elias.....	76 Mulberry.
Bonnell, J. M., Son & Co.....	198 Market.
Ronnett, John.....	120 Market.
Brewer, Henry.....	144 Washington.
Broemel & Woemer.....	227 Springfield Ave.
Champlin, Chas. B.....	71 Central Ave.
Cowen, W. H.....	5 Cedar.
Crawley, Wm. L.....	490 Broad.
Demars, Wm.....	21 Mechanic.
Demmick, Geo. W.....	87 Summer Ave.
Dunn, E., & Bro.....	104 Market.
Edwards, Chas. H.....	944 Broad.
George, J. H.....	162 Plane.
Groel, Chas.....	149 Howard.
Groel, Henry.....	188 Court.
Harris, Jno. A.....	352 Washington.
Hill & Kingsley.....	38 New.
Hoffman, Louis.....	122 Elm.
Hohman, E.....	17 William.
Howarth Bros.....	304 Market.
Jacobus, Wm.....	78 Clinton Ave.
Kautzman, Gottfried.....	100 Belmont Ave.
Keller, Peter.....	97 Mercer.
Kelly, Thos. F.....	22 Bowery.
Koecher, Jacob.....	46 Belleville Ave.
Kunz, Chas.....	363 Market.
Leibe, Henry.....	528 Orange.
Littell, A. P., & Son.....	460 Broad.
Littell, Wm. F.....	100 New.
McDowell, M.....	197 Warren.
McIlree, Jno.....	43 William.
Marsh, Albert G.....	582 Orange.
Miller & Whitehead.....	890 Broad.
Palmatier, F. M.....	14 New.
Perklus, M. V.....	256 Market.
Rehman, Louis.....	80 Spr ngfield Av.
Rutherford & O'Crwley.....	374 Broad.
Sandford Bros.....	349 Broad.
Schlegel, Philip.....	37 Norfolk.
Schwartzwelder, Geo.....	498 Springfield Av.
Steiner, Albert.....	281 Bank.
Steph-n, Louis.....	30 Bank.
Stoepel, August.....	234 Ferry.
Sturm & Beam.....	926 Broad.
Sutcliffe & Nyon.....	372 Broad.
Wackermann, E.....	367 Plane.
Wagner, Adam, Jr.....	10 Hamburg Pl.
Zimmerman & Brown.....	228 Market.
Zipf, Jacob.....	110 Ferry

## MISCELLANEOUS.

Atha, Benjamin & Co., Steel Works.....	ft. of Chapel.
Biederman, Wm., Coppersmith.....	29 So. Orange Av.
Bless & Drake, Mfrs. Self-Heating Irons.....	173 N. J. R. R. Av.
Browe & Son, Mfrs. Gas Fixtures.....	24 Bank.

## NEWARK—Continued.

Brown, T. H., Brass Worker.....	354 Washington.
Burnett & Leonard, Boiler Makers.....	448 Ogden.
Burns, Thos. H., Mfr. Iron Railings.....	201 Commerce.
Chapman, H. W., Machinery.....	231 Mulberry.
Conlan, B. & Co., Mfrs. Brass Goods.....	49 Lawrence.
Coventry, Wm. & Co., Brass Founders.....	101 N. J. R. R. Ave.
Crowell & Coe, Iron and Steel.....	106 Mulberry.
Delaney, D. & G., Mfrs. Springs.....	85 Mechanic.
Demorest, D. W., Iron.....	39 Mechanic.
De Vausney, Jacob, Coppersmith.....	20 Bank.
Dickinson, Wilbur F. Mfg. Co.....	Locks.
Dodge, Blake & Lyons, Steel.....	Montclair R. R.
Edwards, Burton & Lorey, Mfrs. Locks.....	135 Halsey.
Furness, Banister & Co., Mfrs. Cutlery.....	Nassau Works.
Hedges & Bro., Brass Founders.....	23 N. J. R. R. Ave.
Heinisch's, R. Sons, Mfr., Cutlery.....	100 Bruce.
Heinze, Chas. E., Mfr. Bits.....	314 Market.
Heller Bros., Mfrs. Files, Montclair R. R., cor. Mt. Prospect Ave.....	
Helmstaedter, Adam, Mfr. Locks.....	67 N. J. R. R. Av.
Horschell, Jno. A., Mfr. S. fcs.....	27 Lawrence.
Jacobus, A. D., Brass Founder.....	60 Elm.
Johnson & Bros., Mfrs. Files.....	1 Commercial.
Kellogg, Frank, Plumbers' Materials.....	45 Mechanic.
Kuntze, Aug. C., Mfr. Chain.....	264 Walnut.
Krug & Biele, Mfrs. Hardware.....	20 Broome.
Lathrop & Co., Machinists' Supplies.....	200 Market.
Langstroth, Thos. W., Mfr. Locks.....	14 Mechanic.
Lyons, L. J. & Co., Boiler Makers.....	491 Comm-rce.
McKechnie, John, Mfr. Files.....	7 N. J. R. R. Av.
McMillan, D. C., Mfr. Axes.....	254 Market.
Mergott, Julius E. & Co.....	Mfrs. Brass Goods, 40 Mechanic St.
National Car Spring Co.....	Mfrs. Car Springs, Chapel St.
Newark Hardware Works.....	Mfrs. Scales, 60 N. J. R. R. Ave.
New Jersey Zinc and Iron Co.....	Foot of River.
Parker, G. E., Brass Founder.....	19 Mechanic.
Ray, John, Mfr. Files.....	67 N. J. R. R. Ave.
Richardson Bros., Mfrs. Saws.....	19 River.
Ritchie & Son, Mfrs. Locks.....	274 Market.
Roberts & Havell.....	Mfrs. Brass Goods, 286 Washington.
Romer & Co., Mfrs. Locks.....	141 N. J. R. R. Ave.
Ruther, Wm., Mfr. Chains.....	53 N. J. R. R. Ave.
Shields, S. J., Mfr. Bolts.....	375 Market.
Slaight, Thos., Mfr. Locks.....	115 N. J. R. R. Ave.
Smith, Albert.....	Mfr. Iron Railings, 93 N. J. R. R. Ave.
Spaeth, Edw., Mfr. Skates.....	31 Orleans.
Thatcher, James W.....	Machinists' Supplies, 35 Mechanic.
Toler, Jno. Son & Co., Mfrs. Castors.....	108 Adams.
Tomlinson Spring Co.....	Mfrs Springs & Axles, 233 N. J. R. R. Ave.
United States Sterling Mfg. Co.....	Cutlery, 61 N. J. R. R. Ave.
Waddell, J. O., Mfr. Brass Faucets.....	7 Alling.
Watts, Campbell & Co., Machinery.....	298 Ogden.
Wiss, J. & Sons, Mfrs. Cutlery.....	26 Bank.
Wrigley, Edward, Machinery.....	35 N. J. R. R. Ave.
Wrigley, John, Machinery.....	164 McWhorter.
Zusie, Edward, Brass Founder.....	29 Mechanic.

## NEW BRUNSWICK.

Corcoran, John.....	Sheet Iron Worker.
Dey, Chas. H.....	Plumber.
Dey, Walter & Son.....	Plumbers.
Donley & McFadden.....	Plumbers.
Empire Machine Works.....	
Firman, Thomas.....	Plumber.
Hayton, R. F.....	Iron Founder.
Kelly, Wm. B.....	Plumber.
Lavere, Jas.....	Plumber.
McColligan, Edw.....	Plumber.
McCormick, Chas.....	Plumber.
McDonald, P. J.....	Plumber.
McKee, Hugh.....	Plumber.
Munn, Geo. B.....	Machinist.
Murphy, Patrick.....	Plumber.
New Jersey Lamp and Bronze Works.....	
Waldron, Jno. & E.....	Machinists.
Weigel, Phillip, Jr.....	Iron and Steel.

**OCEAN BEACH.**

Bryan, Thos.....Plumber.  
 Haverstick, Jacob & Son.....Plumbers.  
 McKeever, Chas.....Plumber.

**ORANGE.**

Banta, Chas. W.....Gas Fitter.  
 Blaurock, Samuel.....Plumber.  
 Hand & Howard.....Plumbers.  
 Muller, Fred. W.....Plumber.  
 O'Rourke & Brown.....Plumbers.  
 Ward, W. J.....Plumber.

**ORANGE VALLEY.**

Metz, J. J.....Plumber.

**OXFORD.**

Oxford Iron Co.....Mfrs. Iron and Nails.

**PASSAIC.**

Alwaney, Joseph.....Plumber.  
 Falstron & Toenquist.....Copper Works.  
 Lyncke, T. T.....Plumber.

**PATERSON.****MACHINISTS.**

Archer, Jas.....Machinists' Assoc'n.  
 Beggs, Eugene.....Mason, Joshua.  
 Cooke Locomotive and  
 Machine Co.....Nussey, Jos. & Co.  
 Danforth Locomotive  
 and Machine Co.....Rempt, Chas.  
 Ea twood, Benjamin.....Rogers' Locomotive &  
 Jehn, Max.....Machine Works.  
 Kohlhaas, Christian.....Royle, Jno. & Sons.  
 Union Mfg. Co.  
 Watson Machine Co.

**PLUMBERS, STEAM AND GAS FITTERS.**

Atchison, W. Jr.....McNab, Thos.  
 Bowering, John.....Miller, John.  
 Carshore, W. J.....Ower, Hay.  
 Duncan, Robert.....Rogers, Alfred.  
 Heckman & Gybers.....Stewart, David.  
 Kearney, Jas. Jr.....White, Jos.  
 McGirr & Elvin.

**MISCELLANEOUS.**

Addy, Geo.....Mfr. Bolts & Rivets.  
 Atherton, Robt.....Silk Machinery.  
 Gesswein, Fred W.....Mfr. Files.  
 Grant Locomotive Works.  
 Hayes, Wm. H.....Brass, Copper & Iron Works.  
 Hilton, Benjamin.....Iron Founder.  
 Hurdley, George.....Iron Founder.  
 Kearney & Foot.....Mfrs. Files.  
 Lapham & Co.....Boiler Makers.  
 McCulloch, R.....Mfr. Brass Goods.  
 Norris, William.....Mfr. Steam Gauges.  
 Passaic Rolling Mill Co.  
 Paterson File Works.  
 Paterson Iron Co.  
 Pennington, R. S.....Mfr. Files.  
 Simonton, T. C., & Co.....Iron & Brass Founders.  
 Smith, S.....Boiler Maker.  
 Taylor, Baldwin.....Brass Founder.  
 Taylor, Robert.....Brass Founder.  
 Union Bolt Works.....Mfrs. Bolts.  
 Weinman & Kearney.....Mfrs. Files.  
 White, Jos.....Plumber.  
 Wrigley, Thomas.....Machinery.  
 Wrigley, John & Son.....Mfrs. Bolts.

**PAULSBOROUGH.**

Cox & Brother.....Iron Founders.

**PERTH AMBOY.**

Green, Oscar.....Plumber.  
 Lingle, Thomas.....Iron Founder.  
 Schantz, Marcus.....Iron Founder.  
 White, Patrick.....Iron Founder.

**PETERSBURG.**

Entriken, F. M.....Machinist.

**PHILLIPSBURG.**

American Sheet Iron Co.  
 Andover Iron Co.  
 Drinkhouse, F. F.....Malleable Iron & Brasses.  
 Leavitt, W. A.....Delaware Rolling Mill.

**PHILLIPSBURG—Continued.**

Phillipsburg Stove Works.  
 Sheridan, J. H.....Plumber.  
 Tippe t & Wood.....Boiler Makers.  
 Warren Foundry & Machine Co.

**PITTSTOWN.**

Deats, Little & Co.....Mfrs. Reapers & Mowers.

**PLAINFIELD.**

Addis, William.....Plumber.  
 Baker, H. H.....Machinery.  
 Carney Brothers.....Plumbers.  
 Gavett & Co.....Gas Fitters.  
 Kenyon, James H.....Machinist.  
 McIntire, J. F.....Plumber.  
 Schenck, J. N.....Machinist.

**POMPTON.**

Pompton Iron & Steel Co.

**PORT ORAM.**

Port Oram Mfg. Co.....Mfrs. Iron.

**POTTERSVILLE.**

Sovereign, Henry.....Machinist.

**POWERTVILLE.**

Powerville Iron Works.

**PRINCETON.**

Logan, William.....Plumber.  
 Margerum, J.....Gas Fitter.

**RAHWAY.**

Boyne, M. J.....Plumber.  
 Cloke, William H.....Plumber.  
 Walsh, J. H.....Plumber.

**RARITAN.**

Kenyon Bros.....Iron Founders and Machinists.  
 Kenyons & Rupert.....Agl. Machine Works.  
 Opie, Wm. S.....Mfr. Mowers & Reapers.  
 Wyckhoff, Oscar H.....Iron.

**RED BANK.**

Cumbersome & White.....Plumbers.  
 McMahon, William.....Plumber.  
 Schroeder, Henry C., Jr.....Iron Founder.

**RIDGEWOOD.**

Duffy, Michael C.....Plumber.

**RIEGELSVILLE.**

Taylor, Stiles & Co.....Mfrs. Planing Mach. Knives.

**ROCKAWAY.**

American Swedes Iron Co.....Rolling Mill.  
 Hongland, M.....Iron Founder.  
 Peer, J. J.....Mfr. Edge Tools.

**ROCKSBURGH.**

Young, Isaac.....Mfr. Plows.

**SADDLE RIVER.**

Packer, William W.....Iron Founder.  
 Ward, W. J. C.....Mfr. Edge Tools.

**SALEM.**

Ayers, James & Co.....Machinists.  
 Hall, D. D.....Machinist.  
 Pierpoint, William.....Machinist.  
 Wister, John.....Iron.

**SCHRAALBURGH.**

Cooper, T. R.....Mfr. Chain.

**SEABRIGHT.**

Cooper, Wm. H.....Plumber.  
 Ferris, John.....Plumber.  
 McMahon, Wm.....Plumber.

**SECAUCUS.**

Secaucus Iron Co.

**SHREWSBURY.**

Van Schaick, Robt.....Machinist.

**SMITHVILLE.**

Smith, H. B., Machine Co.,.....Mfrs. Woodworking Machinery.  
 Story, B. W.....Machinist.  
 White, J. J.....Machinist.

**SOUTH AMBOY.**

Brick, Riley A.....Iron Works.

**SOUTH ORANGE.**

Barnard, G. L.....Plumber.  
 Hand, James.....Plumber.  
 Kitchell, J. L.....Plumber.

**SPRING MILL.**

Bateman, E. S. & F.....Mfrs. Agri. Impls  
 Loring, Thos. & S n.....Iron Founders.

**STEWARTSVILLE.**

Kinney, Henry.....Machinist  
 Sharp, J. H. & Son.....Machinists.

**STOCKTON.**

Deats, Hiram, Jr.....Iron Founder.

**SUMMIT.**

Munssinger, T.....Plumber.  
 Ryan, Thos.....Plumber.  
 Weir, S. L.....Plumber.

**SWEDESBOROUGH.**

Decker, Chas. B.....Iron Founder.  
 Sparks, M. C.....Sheet Iron Worker.

**TENNENT.**

Stokes, Saml, H.....Mfr. Files.

**THREE BRIDGES.**

Kugler, Oliver.....Mfr. Plows.

**TOMS RIVER.**

Lake, J. C.....Iron Founder.

**TOWN OF UNION.**

Knack, A.....Plumber.

**TRENTON.****PLUMBERS, STEAM AND GAS FITTERS.**

Bond, Wm. A.	Ingram, Thos.
Boyd, Thos. C.	Kafir, G. W.
Brady, Thos. C.	Katzenbach, F. S. & Co.
Craig, Thomas.	Loder, Daniel.
Curtis, Wm. H.	McKeever, Walter.
Dignan, F. & E. F & Co.	Margerum, Chas.
Dissinger & Allison.	Schermerhorn, Abram.
Dobbins, Chas. H.	Siddall, Thos.
D'Unger & Son.	Wilkes, Moses.

**MISCELLANEOUS.**

American Saw Co.  
 Billingham, Jno. & Sons.....Mfrs. Chains.  
 Brackett, W. H.....Machinist.  
 Butterworth, Jno, Jr.....Mfr. Agl. Impls.  
 Butterworth, W. H.....Mfr. Agl. Impls.  
 Fisher, Clark.....Mfr. Anvils.  
 Ford, S. W. & E. R.....Mfrs. Iron Railings.  
 Gill, B. & Son.....Mfrs. Agl. Impls.  
 Golding, J. C.....Mfr. Mill Picks.  
 Hayes, Timothy W.....Machinist.  
 Hayes & Bro.....Iron.  
 Horton, Jas.....Mfr. Chains.  
 Hutchinson, C. M. & Son.....Iron & Steel.  
 Irvin, Wm. H.....Machinist.  
 Lovett, Aaron S. & Co.....Machinists.  
 McFarland, Wm.....Iron Founder.  
 MacKenzie & Wilkes.....Machinery.  
 Mercer Zinc Co.  
 Milburn, Joseph.....Brass Works.  
 New Jersey Agri. Works.  
 New Jersey Steel and Iron Co.  
 Novelty Iron Works.  
 Phoenix Iron Co.  
 Roebling's, John A. Sons Co.....Mfrs. Wire Rope.  
 States, Alex. M.....Mfr. Chain.  
 Strasser, J. J.....Mfr. Scales.  
 Thropp, Jno. E.....Machinist.  
 Trenton Iron Co.  
 Trenton Lock & Hardware Co.  
 Trenton Vise & Tool Works.  
 Watson, Jn.....Machinist & Brass Founder.

**TRENTON—Continued.**

Weaver, Ferris & States.....Mfrs. Chains.  
 Whitaker & Skirm.....Iron Works.  
 Wood, H.....Iron & Steel.  
 Yard, Joseph B.....Mfr. Iron Railings.

**VIENNA.**

Parks, Morris G.....Iron Founder.

**VINCENTOWN.**

Haines, Elwood S.....Machinery.

**VINELAND.**

Armstrong, R. S. & Co.....Iron Founders.  
 Blaisdell, R. H.....Machinist.  
 Mason, C. H. & Son.....Plumbers.  
 Remington, J. W.....Mfr. Plows.  
 Wells, Jas. H.....Machinist.

**WASHINGTON.**

Bowers, S. P.....Iron Founder.

**WEST BERGEN.**

Spaulding, Jennings & Co.....Mfrs. Steel.

**WESTVILLE.**

Duncan, Geo. W.....Plumber.  
 Kighn, Isaac.....Iron Founder.

**WOODSTOWN.**

Haines, John.....Iron Founder.

**WORTENDYKE.**

Ennis, W. C.....New York, Susquehanna & Western  
 R. R.

**NEW MEXICO.****ALBUQUERQUE.**

New Mexico Iron & Machine Co.  
 Norman & Co.....Gas Fitters.

**LAS VEGAS.**

Adlon, J. C. & Son.....Iron Works.  
 Burnett & Lyon.....Plumbers.  
 Fleming, James.....Plumber.  
 Roberts & Wheelock.....Gas Fitters.  
 Robinson, A. A.....At-hison, Topeka & Santa Fe  
 R. R.

**SANTA FE.**

McKenzie, W. A.....Plumber.

**NEW YORK.****ADAMS.**

Saunders, T. P.....Iron Founder.

**ADDISON.**

Horn, E. J.....Iron Founder.  
 Wildrich, Geo. W.....Mfr. Agl. Impts.

**AKRON.**

Goslin, Alex.....Iron Founder.  
 Paxon, Amos B.....Machinist.

**ALBANY.****IRON FOUNDERS.**

Albany Stove Co.	McCoy, S. B.
Carlisle & Hill.	McKinney, James.
Davenport, Wm.	Page, Isaiah.
Doyle, William.	Perry & Co.
Haight & Clark.	Ransom Stove Works.
Haskell's Henry C. Son.	Rathbone, Sard & Co.
Huber & Hartnett.	Sager, Peter.
Lamb, P. W.	Townsend & Jackson.
Littlefield Stove Co.	Van Wormer, J. & Co.

**MACHINISTS.**

Abbott, B. F.	Haskell's, Henry C. Son.
Albany Agl. & Machine Works.	McLaren, James.
Anthony, Henry A.	Midlam, S. C.
Clark, Thomas.	Rogers, James.
Dobbs, Thomas.	Rogers, John.
Doncaster, Daniel, Jr.	Scopes, Edward.
Gallagher & Scopes.	Skinner & Arnold.
Gleedhill, James.	Thayer, Augustus.
Harley, Alfred.	Townsend & Jackson.

**ALBANY—Continued.**

**PLUMBERS, STEAM AND GAS FITTERS.**  
 Anderson, Alfred B. Leonard, Nicholas.  
 Barnett, John. McCann, John.  
 Bramson & Bro. McGoldrick, Peter J.  
 Buegner, John D. Moran, John H.  
 Delehanty, Michael & Son. Mulcahy, Edward.  
 Doyle, John. Nesbitt, Edmund.  
 Dugan, Thomas. Nesbitt & Gray.  
 Favrean, Joseph. O'Brien, Philip.  
 Fitzgerald & Guinan. O'Connor, James L.  
 Franklin, Thos. B. Patterson, Smith & Co.  
 Gaylor, John H. Ridgway & Russ.  
 Gilmour, Allen. Robinson, Geo.  
 Goetz, Edward. Robinson, S. A. & Bro.  
 Gorman, R. T. Shevlin, Geo. F.  
 Gorman Bros. Shields Bros.  
 Harper, H. V. Sweet, W. H. D.  
 Hearley, P. J. Toomey & McEbrone.  
 Hyde & Bro. Wallen, F. J.  
 James, J. Edward. Walsh, John D.  
 Kavanaugh, D. F. Ward, W. J. & Son.  
 Kern, J. P. Wavengin, William.  
 Langan, Michael & W. J. Wilkinson, Chas. E.

**MISCELLANEOUS.**

Albany Car Wheel Works.  
 Albany City Iron Co. Mfrs. Iron.  
 Albany Machinery Agency.  
 Albany Mfg. Co. Model & Pattern Makers.  
 Albany & Rensselaer Iron & Steel Co.  
 Becker, Christopher R. Pattern & Model Maker.  
 Blackall, R. C. New York & Canada R. R.  
 Blair & Kinnear. Brass Founders.  
 Brohm, B. Mfr. Files.  
 Burdick & Sandford. Mfrs. Hardware.  
 Burgess, W. T. Iron & Steel.  
 Campbell Bros. Sheet Iron Works.  
 Capital City Malleable Iron Co.  
 Corning & Co. Iron, etc.  
 Cox, John. Brass Founder.  
 Crann, H. M. Mfr. Tools.  
 Cunliff, Simeon. Mfr. Springs.  
 Decker, P. K. & Co. Mfrs. Agl. Impts.  
 Delehanty, M. & Son. Copper Smiths.  
 Dickey, Alex. Copper Smiths.  
 Dickson, G. J. Mfr. Locks.  
 Dickson, Wm. & Son. Brass Founders.  
 Dori, Albert. Copper Smiths.  
 Dugan, Thomas. Sheet Iron Worker.  
 Fitzgerald & Guinan. Copper Smiths.  
 Gibbs, Chas. W. Pattern & Model Maker.  
 Gibbs, Samuel W. Pattern & Model Maker.  
 Gompf, H. G. & Co. Mfrs. Cutlery.  
 Griffin, John L. Copper Smiths.  
 Griffin, Patrick H. Copper Smiths.  
 Hallas, Wm. Pattern & Model Maker.  
 Hopkins, Chas. H. Machinery.  
 Hyde & Bro. Copper Smiths.  
 Jagger Iron Co. Mfrs. Iron.  
 Kampf, Stephen. Mfr. Shovels.  
 Keeler, W. H. Pattern & Model Maker.  
 Kern, John. Copper Smiths.  
 Lansing & Co. Mfrs. Saws.  
 Law, Samuel. Mfr. Files.  
 Livingston, Robert. Boiler Maker.  
 Lyon, Nelson & Bro. Mfrs. Agri. Impl'ts.  
 McArthur Bros. Brass Founders.  
 McDonald, D. & Co. Mfrs. Gas Meters.  
 Mulcahy, Edward. Copper Smiths.  
 Page & Sil. Malleable Iron Works.  
 Rennie, John Jr. Mfr. Shovels.  
 Risedorff, W. J. Mfr. Agri. Impl'ts.  
 Sample, W. H. Mfr. Cutlery.  
 Schrodt, F. Mfr. Shovels.  
 Shevlin, Patrick. Boiler Maker.  
 Skinner & Arnold. Boiler Makers.  
 Sloss, Robert. Mfr. Iron Railings.  
 Smyth & Sons. Mfrs. Files.  
 Sprangenberg, H. Mfr. Cutlery.  
 Sullivan & Ehlers. Mfrs. Safes.  
 Thacher, Lathrop & Co. Mfrs. Car Wheels.  
 Universal Sash Lock Co.  
 Van Allen, A. Jr. Mfr. Iron Railings.  
 Viele, Maurice E. Iron, &c.  
 Walsh, Stephen S. Boiler Maker.  
 Ward, W. J. & Son. Copper Smiths.

**ALBANY—Continued.**

Wheeler & Melick Co. Mfrs. Agri. Impl'ts.  
 Wood, W. A., Mower & Reaper Co.  
 Ziraix, J. M. Mfr. Cutlery.

**ALBION.**

Bacon, Scott. Iron Founder.  
 Bordwell, J. Gas Fitter.  
 Curtis Mfg. Co. Mfrs. Agri. Impl'ts.  
 McGowan, Wm. Machinist.  
 Vanstone, J. J. Machinist.  
 Wolford, J. W. Machinist.

**ALDEN.**

Durkee, G. B., & C. R. Mac<sup>1</sup> instrs.

**ALFRED.**

Sherman, George. Machinist.

**ALFRED CENTRE.**

Langworthy & Davis. Iron Founders.  
 Place, T. Machinist.

**ALLENTOWN.**

Fox & Cavanaugh. Machinists.  
 Sheffield Hardware Co. Mfrs. Hardware.

**ALMOND.**

Wallace, O. D., & Co. Iron Founders.

**ALTONA.**

Palmer, G. W. & F., & Co. Iron, &c.  
 Reynolds, John F. Mfr. Iron  
 Stackpole, Stephen. Iron, &c.

**AMBER.**

Newman, Addison. Iron Founder.

**AMENIA.**

Bartlett & Mead. Mfrs. Agri. Impl'ts.  
 Morgan, Geo. Mfr. Agri. Impl'ts.  
 Wilson & Eaton. Mfrs. Agri. Impl'ts.

**AMENIA UNION.**

Buckley, Chas. E. Iron Founder.

**AMSTERDAM.**

Chemical Machine Co.  
 Collins & McKinney. Boiler Makers.  
 Dore, James E. Gas Fitter.  
 Dore, Michael. Plumber & Gas Fitter.  
 Dwyer & McGrath. Gas Fitters.  
 McCowatt, David. Gas Fitter.  
 McElwain, H. S., & Son. Iron Found rs.  
 Schuler, Davis W. Mfr. Steel Springs.

**ANCRAM.**

Finch, Geo. W. Machinist.

**ANDES.**

Miller, Thomas S. Iron Founder.  
 Muir, Thomas. Millwright.

**ANDOVER.**

Henderson, L. Machinist.  
 O'Donnell, Anthony. Iron Founder.  
 Prest, John. Machinist.

**ANTWERP.**

Brown, N. B. Machinist.  
 Hogan Bros. Iron Founders.  
 Jefferson Iron Co. Mfrs. Iron.  
 Waddell, Lloyd D. Machinist.

**ARCADE.**

McKeever, Wm. Machinist.

**ARK WRIGHT.**

Cole, E. F. Brass Founder.

**ASTORIA.**

Lewis, Charles. Plumber.  
 Robinson, F. Plumber.  
 Sullivan, Daniel. Plumber.

**ATHENS.**

Dernell, H. F., & Co. Mfrs. Ice Tools.  
 Travis, D. W. & Bro. Iron Founders.

**ATTICA.**

Fay, Earl. Machinist.

**AUBURN.**

Alden, J. M.	Mfr. Agrl. Impl'ts.
Auburn Bit & Iron Co.	Mfrs. Hardware.
Auburn Iron Works.	Rolling Mill.
Auburn Mfg. Co.	Mfrs. Scythes, &c.
Auburn Tool Co.	Mfrs. Tools.
Barrett, Stephen H.	Plumber.
Beardsley, Wheeler & Co.	Machinery.
Birdsall, E. M. Co.	Mfrs. Agrl. Impl'ts.
Bradley, A.	Iron Works.
Brown, C. G.	Southern Central R. R.
Clapp, E. D., Mfg. Co.	Rolling Mill.
Cookin, Calvin W.	Boiler Maker.
Coy, Nehemiah	Iron, &c.
Crane, W. W.	Founder & Machinist.
Curtis, John	Iron Founder.
Dolphin, Wm.	Mfr. Files.
Eccles, Richard	Mfr. Hardware.
Eddy, Chas. H.	Machinist.
Foster, Jos.	Machinist.
Harrington Bros.	Plumbers.
Higgins, Patrick	Machinist.
Hollman, John	Plumber.
Jones & Merritt	Iron Founders.
Kavanagh, D.	Plumber & Gas Fitter.
McNicol, James	Plumber.
Metz & O'Brien	Plumbers.
Mills, J. L.	Gas Fitter.
Osborne, David M. & Co.	Mfrs. Reapers & Mowers.
Palmer, S. W. & Co.	Machinists.
Quick, Isaac W.	Machinist.
Reynolds & Co.	Mfrs. Mowing Machines.
Rohery, Augustus	Mfr. Files.
Sampson, T. C.	Mfr. Files.
Schweinfurth, Chas. J.	Pattern & Model Maker.
Scott, Wm.	Mfr. Saws.
Shapley, Chas.	Iron Founder.
Sharpley & Jones	Iron Founders.
Sheldon & Co.	Rolling Mill.
Stevens, A. W. & Son	Mfrs. Threshing Machines.
Thornton, H. G.	Mfr. Files.
Tuttle & Reed	Rolling Mill.
Wadsworth, David & Son	Mfrs. Scythes.
Woodcock, L. M. & Co.	Founders & Machinists.

**AURELIUS.**

McIntosh, John	Machinist.
----------------	------------

**AU SABLE CHASM.**

Mooney, W. M. & Co.	Mfrs. Nails.
---------------------	--------------

**AU SABLE FORKS.**

Rogers, J. & J. Iron Co.	Mfrs. Iron.
--------------------------	-------------

**AVOCA.**

Raplee, T.	Machinist.
------------	------------

**AVON.**

Randolph, B. H.	Iron Works.
-----------------	-------------

**BABYLON.**

Field, B. P.	Plumber.
--------------	----------

**BAINBRIDGE.**

Excelsior Mfg. Co.	Mfrs. Agrl. Impl'ts.
Van Horne, B. P.	Mfr. Agrl. Impl'ts.

**BALDWINSVILLE.**

Heale & Morris	Machinists.
Young, J. M.	Mfr. Iron Rakes.

**BALLSTON SPA.**

Burr, Geo. W.	Machinery.
Harris, S. H.	Founder & Machinist.
Holmes, Jno. F.	Iron Founder.
Knickerbocker, Henry	Mfr. Edge Tools.
Park, Bros.	Machinists.
Thomas, John B.	Plumber.

**BARKERS.**

Bennett & Brown	Mfrs. Agrl. Impl'ts.
-----------------	----------------------

**BARNES' CORNERS.**

Jones, Lewis	Mfr. Agrl. Impl'ts.
--------------	---------------------

**BATAVIA.**

Batavia Portable Engine Co.	
Bradish, P. F.	Mfr. Agrl. Impl'ts.
Freeman, B. F.	Plumber and Gas Fitter.

**BATAVIA—Continued.**

Mackey, D. S.	Millwright.
Tompkins, Peter	Gas Fitter.
True, M. E.	Mfr. Saws.
Wiard Plow Co.	Mfrs. Plows.

**BATH.**

Faucett, James	Farm Machinery.
Hardenbrook & Co.	Iron Founders.
Hastings & Ross	Founders & Machinists.
Ross, Jno. M.	Machinist.

**BATH ON THE HUDSON.**

Patterson, Thonas	Mfr. Nails.
-------------------	-------------

**BEDFORD STATION.**

Reynolds, James H. S.	Iron Worker.
-----------------------	--------------

**BEEKMAN.**

Brown Bros.	Iron Founders.
McCarter, Arthur & Son	Machinists.

**BEEKMANTOWN.**

Rea, John & Co.	Iron Founders.
-----------------	----------------

**BELFAST.**

Cook, N.	Machinist.
Pratt, Eugene	Machinist.

**BELLPORT.**

Petty, Alfred	Millwright.
---------------	-------------

**BELMONT.**

Clark, Bros.	Founders & Machinists.
--------------	------------------------

**BERGEN.**

Miller, Orville	Brass Founder.
-----------------	----------------

**BERKSHIRE.**

Snedaker, John	Mfr. Tools.
----------------	-------------

**BERLIN.**

Green, Jas. L.	Iron Founder.
----------------	---------------

**BERNE.**

Gilbert Bros.	Iron Founders.
---------------	----------------

**BIG FLATS.**

Johnson, Grover	Machinist.
-----------------	------------

**BINGHAMPTON**

Adams, Edwin	Brass Founder.
Barmley, F. B.	Plumber.
Bennett, E. L. & Co.	Machinery.
Binghampton Hoe & Tool Co.	
Bolles, L. Hoe & Tool Co.	
Bramble, Martin P.	Plumber.
Broughton & Niles	Plumbers.
Brownell, Julius A.	Millwright.
Costello, Francis P.	Plumber.
Cronin, Jas. P.	Plumber.
Gay, Elbridge	Pattern and Model Maker.
Heath, W. A.	Machinist.
Herald, J.	Iron Founder.
Hulbert, N.	Mfr. Agrl. Impl'ts.
Hungerford & Vickers	Plumbers.
Jackson, J. H.	Machinist.
Jones Scale Works	
Knapp & Heath	Machinists.
Malden, D. J.	Plumber.
Matthews, I. S. & Co.	Mfrs. Agrl. Impl'ts.
Osgood, H. B. & Co.	Mfrs. Scales.
Parmley, F. B.	Plumber.
Root, E. A.	Pattern and Model Maker.
Rowlingson, D. E.	Machinist.
Schultz, Julius	Machinist.
Scott, William	Machinist.
Shapley, O.	Pattern and Model Maker.
Shapley & Wells	Iron Founders & Boiler Makers.
Sprague, W. H.	Plumber.
Stow, Nelson	Machinist.
Underwood, Jno. W.	Plumber.

**BLENHEIM.**

Lloyd, W. H.	Machinist.
--------------	------------

**BLISS.**

Marsh, Samuel	Machinist.
---------------	------------

**BLODGETTS' MILLS.**

Crandall Bros.	Machinists.
----------------	-------------

**BOMBAY.**

Willy, A. F. .... Mfr. Agl. Impl'ts.

**BOONVILLE.**

Gilbert & Sawyer. .... Iron Founders & Machinists.

**BORODINO.**

Uncless, John A. .... Machinist.

**BOUCKVILLE.**

Crain, C. .... Mfr. Scales.

**BRANCHPORT.**

Paris & Boyd. .... Iron Founders.

**BRASHER FALLS.**

Disham & Kinnehan. .... Iron Founders.

Taylor, James G. .... Machinist.

**BRASHER IRON WORKS.**

Skinner, John F. .... Iron Founder.

**BREAKABEEN.**

Walden Bros. .... Iron Founders.

**BRIDGEHAMPTON.**

Topping, Chas. H. .... Machinist

**BRIER HILL.**

Wilson, Jacob H. .... Plumber.

**BRISTOL.**

Dusenbury, M. H. .... Machinery.

**BROADALBIN.**

Wells, R. .... Mfr. Shovels.

**BROCKETTS BRIDGE.**

Grant, J. .... Machinist.

Van Buren, J. .... Machinist.

**BROCKPORT.**

Avery, O. B. & Co. .... Mfrs. Agl. Impts.

Cooley, Truman. .... Machinist.

Johnston Harvester Co. .... Mfrs. Agl. Impts.

Keller, M. A. .... Mfr. Thrashers.

Morgan, D. S. & Co. .... Mfrs. Reapers & Mowers.

Whiteside, Barnett & Co. .... Iron Founders.

Williams, Geo. H. .... Steam & Gas Fitter.

**BROOKLYN.****BOILER MAKERS.**

Abendroth & Root Mfg. Co. .... Noble Cor. West.  
Cunningham, Christopher. .... Greenpoint Av. nr.  
Kingland Av.

Dailey, Jno. .... Flushing Av. cor. Bedford Av.

Densmore, Byron. .... Flushing Av. nr. Bedford Av.

Higgins, Thos. L. .... ft. Harrison.

Logan Iron Works. .... 52 Commercial.

McAdam, William. .... 66 Milton.

McNeil, Donald. .... 62 Seabring.

Patten, J. J. & Co. .... 59 Greenpoint Av.

Reed, John A. .... Front nr. Pearl.

Smith Bros. .... Jay cor. Plymouth.

Stead, James. .... 65 Kent.

Taylor, W. R. .... 349 1st E.D.

Vogt, Henry & Bros. .... 61 N. 13th.

**BRASS FOUNDERS.**

Boettcher, John G. L. .... 132 1st E.D.

Bowie, John. .... 112 Front.

Bowie, Robert. .... 41 N. Second.

Bulger, Thomas. .... 70 N. Second.

Connolly, P. .... 351 Adams.

Farrell, Thomas. .... 358 N. Second.

Floyd, W. G. .... 26 1st E.D.

Fullerton, John. .... 350 1st E.D.

Horning, John. .... 1368 De Kalb Av.

Korner, Gustav. .... Hope cor. 9th E.D.

Pepper, John. .... 186 Plymouth.

Renton, F. A. .... 70 West.

Schoener, W. L. .... 226 N. 9th.

Steiglitz, Wm. .... 37 Lorimer.

Titus, W. H. .... 377 Broadway.

Wohlfarth, August. .... 132 Leonard.

**BROOKLYN—Continued.****COPPERSMITHS.**

Arwe, A. H. A. .... 1348 De Kalb Av.

Ash, Joseph H. .... 55 Boerum Place.

Berg-trom, Peter L. .... 215 Water.

Clark & Best. .... 161 Dikeman.

Creque, Ronalds & Co. .... Boerum Place cor

Schermerhorn.

Frank, Frederick. .... 79 Kent Av.

Jenkins, E. T. .... 63 Kent Av.

McLaughlin, W. D. .... 255 Van Brunt.

Spoerry, Julius. .... 50 Graham Av.

Wael, Christian. .... 60 N. 3rd.

**IRON DEALERS.**

Bennett, William. .... 245 Pearl.

Cammerer, Lewis. .... De Kalb Av. nr. Navy.

Davis, W. H. .... 64 Rutledge.

Dugro, Philip H. .... 132 Ten Eyck.

Glassy, Thomas. .... 96 Plymouth.

Harrington, Michael J. .... 62 N. 6th.

Jordan Iron & Chemical Co. .... 5th cor. N. 11th.

Kelly, James. .... 346 Oakland.

Lawless, Charles. .... 51 Sa-kett.

Lewinske, Philip. .... 254 Nassau.

Nash, Wm. .... 510 1st E.D.

Patten, J. W. Jr. & Co. .... 59 Greenpoint Av.

**IRON FOUNDERS.**

Auer & Co. .... 202 N. 5th.

Badger, Horace D. .... 1st & S. 11th Sts.

Bell & Fyfe. .... 118 Hope.

Binnis, David W. .... 27 Walworth.

Bliss, E. W. .... Plymouth c. Pearl.

Brooklyn City Foundry. .... Smith c. Grinnell.

Brown & Patterson. .... 8th cor. Hope.

Bryant & Roadsham. .... 28 Clay.

Bulger, James. .... 45 N. Second.

Burr & Hounston. .... 37 Franklin.

Burr & Richmond. .... ft. S. Ninth.

Cheney & Hewlett. .... ft. Greene.

Composite Iron Works. .... ft. Freeman.

Continental Works. .... Calyer cor. West.

Creamer, W. G. & Co. .... Smith cor. Grinnell.

Davis, W. H. .... 62 Rutledge.

Dugro, Philip. .... 132 Ten Eyck.

Eger, Michael. .... N. 11th cor. 3rd.

Felgenhauer, E. .... 43 Throop Av.

Fischer, Henry C. .... 234 Greene.

Franklin Iron Foundry. .... 37 & 39 Franklin.

Fulton Iron Foundry. .... 21 to 27 Furman.

Haas, Francis S. .... 197 Bushwick cor. Scholes.

Healey & Co. .... 255 5th E.D.

Heuvelman & Co. .... 206 9th E.D.

Howell & Saxton. .... 353 Adams.

Kerns, James. .... 217 Water.

Knight Bros. .... 178 Raymond St.

Logan Iron Works. .... 52 Commercial.

Mav, Jacob. .... 850 De Kalb Av.

Metcalf, John W. .... 166 Dikeman.

Mitchell, James. .... 22 Water.

Moore, T. J. & Co. .... Bedford Av. cor. Wallabout.

Mullon, W. .... 313 S. 3rd.

Nason M'fg Co. .... 2 Clay.

North American Iron Works. .... 40 Walton.

Ontwater, Jacob. .... 78 Smith.

Pioneer Iron Works. .... 149 William.

Poulson & Eger. .... 3rd cor. N. 11th.

Read, Wm. .... Jay cor. Water.

Ryer, Benj. & Son. .... 29 Vine.

Schweizer, John. .... 56 Metropolitan Av.

Schubert, F. .... 220 Ellery.

Silk, Thomas. .... 70 Summit.

Simpson, J. S. & G. F. .... 30 Rodney.

Steele & Met-calf. .... Seabring nr. Richards.

Taylor, W. & Sons. .... 23 to 39 Adams.

Terry, Thos. .... 26 Powers.

Willcox & Thompson. .... 21 Furman.

Woerster, F. W. .... 144 1st E.D.

**MACHINERY DEALERS.**

Abbott, Geo. F. .... 245 Pearl.

Atlantic Steam Engine Works. .... Water cor. Adams.

Bailey, James & Co. .... 67 Clymer.

Hall & Jewell. .... 28 Franklin.

Bliss, K. W. .... Plymouth cor. Pearl.

Boone & Vandervoort. .... Park Av. cor. Sandford.

Brady, James. .... 259 Water.

## BROOKLYN—Continued.

Burr Bro., & Battelle.....	212 West.
Carpenter, Thos. D. Jr.....	97 Pearl.
Gill, Philip H.....	Brown cor. Columbia.
Happe, John.....	396 Lexington Av.
Hoffman, Christian.....	225 Water.
Hubbard, Norman.....	97 Pearl.
Hughes, W. H.....	51 Clason Av.
Jewell, A. C.....	26 Franklin.
Jones, Samuel.....	28 Atlantic Av.
Mannhardt Bros.....	169 Throop Av.
McAdams Bro.....	528 Kent Av.
Robertson, John & Co.....	131 Water.
Ross, Chas. Jr.....	33 S. 5th.
Sands, Chas. J.....	87 1st E.D.
Sisum, W. H. H.....	Boerum Place cor. State
Walton, Jonathan.....	90 Pearl.

## MACHINISTS.

Alexander, John W.....	20 Franklin.
Almond, T. R.....	84 Pearl.
Bailey, James & Co.....	67 Clymer.
Ball & Jewell.....	28 Franklin.
Harnett, Jno. L.....	349 Broadway.
Binns, Daniel W.....	27 Walworth.
Bliss, E. W.....	Plymouth cor. Pearl.
Boone & Vandervoort.....	Park Av. cor. Sandford.
Boulter, W. A. & Co.....	85 1st E.D.
Boylan, Michael F.....	26 Washington.
Brady, James.....	259 Water.
Brass, Robert.....	57 Scholes.
Broad & Ewer.....	126 Freeman.
Bulger, James.....	45 N. 2nd.
Burch, J. H.....	377 Broadway.
Burke, Andrew.....	175 Hudson Av.
Carpenter, O. C.....	14 Lorimer.
Carter, J. W. Jr.....	377 Broadway.
Cannell, Eugene.....	13 Adams.
Cornelius, James.....	20 Water.
Cranston & Co.....	85 1st E.D.
Daly, John.....	125 Conover.
Dansel & Smith.....	18 Dunham Pl.
Dougherty, Chas.....	S. 6th cor. 1st.
Edgell, James G.....	9 Hicks.
Eibee, Chas.....	217 23rd.
Emmerick, Frederick.....	386 Bedford Av.
Fanning, John.....	678 Jefferson.
Forbes, Andrew.....	288 Hooper.
Foster, Wm.....	13 Adams.
Freese, John.....	208 Montrose Av.
Gardner, Peter.....	132 Leonard.
Gibson & Elssesser.....	ft. Court.
G. H. P. H.....	Sedgwick, cor. Van Brunt.
Goerig, Jacob.....	170 Johnson Av.
Good, John.....	Park Av., cor. Washington Av.
Graf Joseph.....	Throop Av. cor. Winnett.
Guild & Garrison.....	32 1st E.D.
Hayes, John J.....	Kent, cor. West.
Hibbard, W. H.....	16 High.
Higgins, Thos. L.....	ft. Harrison.
Hughes, W. H.....	51 Clason Av.
Jacques, Samuel.....	296 1/2 Bedford Av.
Jordin, J. E.....	376 Grand.
Kennedy & Dias.....	13 Adams.
Kent, J. W.....	49 Jay.
Lewis & Fowler.....	S Columbia Heights.
Mannhardt, Bros.....	169 Throop Av.
Martin, Lucien.....	377 Broadway.
McIntosh, E. B.....	32 Clay.
Merrill Bros.....	26 1st E.D.
Nugent, Edward.....	20 Water.
Patten, Jefferson J. & Co.....	59 Greenpoint Av.
Peck, W. P.....	41 Smith.
Peters & Whittner.....	55 Atlantic Av.
Pettinill, Daniel G.....	Oak, cor. Franklin.
Piet, Bernard F.....	48 Humboldt.
Pringle & Boyce.....	117 Freeman.
Reed, J. A.....	90 Pearl.
Riley and Cowley.....	Richards, cor. Browne.
Robertson, John, & Co.....	131 Water.
Rochow, Ferdinand.....	Bridge, cor. Plymouth.
Ross, Chas., Jr.....	33 S. 5th.
Rutz, Carl.....	194 Union Av.
Side, Edgar.....	370 S. 1st.
Sisum, W. H. H.....	Boerum pl., cor. State.
Smith, Edmund C.....	18 Dunham Place.
Smith & Doig.....	24 Franklin.
Spahn, Rudolph.....	219 Scholes.

## BROOKLYN—Continued.

St. John & Odell.....	223 N. 2nd.
Stone & Mount.....	231 Leonard.
Taylor, James.....	8 Columbia Heights.
Thompson & Turnbull.....	72 Commerce.
Tilton, Leonard.....	69 Clymer.
Waite & Willdigg.....	58 N. 2nd.
Walton, J.....	50 Pearl.
Weeks & Halsey.....	Pearl, cor. Front.
Weisbecker & Ray.....	17 Hope.
Weiz, Albert R.....	998 Myrtle Av.
White & Price.....	363 Hamilton Av.
Whittaker, Geo.....	55 Atlantic Av.
Whitner, Frank.....	55 Atlantic Av.
Wilson & Son.....	526 Myrtle Av.
Wohlfarth, A.....	132 Leonard.
Wood & Co.....	61 N. 2nd.
Woodward, Chas. J.....	24 Johnson.

## PLUMBERS, STEAM AND GAS FITTERS.

Adams, Jno. Q.....	114 Atlantic Av.
Alexander, Stephen.....	489 Manhattan Av.
Alexander, William W.....	310 Adams.
Allen, William.....	310 Smith.
Allsop, Thos. J.....	92 Pearl.
Armstrong, James.....	409 Myrtle cor.
Ash, Wm. H.....	1100 De Kalb Av.
Atkin, John H.....	422 5th Av.
Barter, J. W.....	314 Atlantic Av.
Barth, Ulrich.....	67 Walton.
Bartlett, Thomas.....	1590 Fulton.
Becker, Valentine.....	290 Grand.
Belford, Edward.....	455 Carroll.
Bennett, Philip.....	1641 1/2 Fulton.
Birkett, Jam. & W.....	169 Columbia.
Blacklin Joseph J.....	344 Court.
Boivie, Harold.....	1692 Fulton.
Bosch, John.....	708 Flushing Av.
Bower, Samuel.....	1071 Gates Av.
Boyne, John.....	136 Hamilton Av.
Brady, J. W.....	766 3rd Av.
Brady, Patrick.....	249 4th, E.D.
Brown, John.....	857 Fulton.
Brown, Richard P.....	394 Atlantic Av.
Bruen, Francis.....	537 5th Av.
Buchanan, Thomas.....	49 Flatbush Av.
Buck, Thaddeus.....	707 1/2 Myrtle Av.
Burnet, Richard J.....	122 10th, E.D.
Callahan, Edward.....	349 Court.
Carley, Edward.....	51 Greenpoint Av.
Carl, John S.....	681 Atlantic Av.
Cla k, John.....	346 Franklin Av.
Clark, R.....	248 Smith.
Cody, E. J.....	33 Carroll.
Coger, Geo. W.....	104 Broadway.
Coggin, Richard.....	195 Putnam Av.
Cole, James.....	156 Smith.
Conklic, P. S.....	594 Atlantic Av.
Conner, T. B.....	258 State.
Connolly, P.....	500 Franklin Av.
Conway, Patrick.....	500 Franklin Av.
Corcoran, Daniel.....	276 Court.
Corcoran, Patrick.....	2 Douglass.
Coste lo, W. J.....	117 Harrison.
Cove t, David D.....	1655 Fulton.
Crawford, E. H.....	176 4th, E.D.
Crear, W. J.....	218 Manhattan Av.
Cummings, George.....	745 Fulton.
Davidson, Alex.....	383 Atlantic Av.
Day, John.....	19 Henry.
Devno, Geo. W.....	411 Graham Av.
Dillon & Rooney.....	541 Atlantic Av.
Donaghy, Archibald.....	372 Myrtle Av.
Donohue, Florence J.....	645 5th Av.
Donovan & Haley.....	882 Fulton.
Dunne & Newsam.....	234 Clinton.
Dyer, Elisha.....	22 Hicks.
Eagan, Michael.....	970 Atlantic Av.
Earle, Samuel.....	327 Myrtle Av.
Edgerton, Thomas.....	173 Court.
Edgerton T. & R.....	308 Columbia.
Ehring, Andrew.....	155 McKibbin.
Ellis, U.....	949 Broadway.
Enderby, Henry.....	95 S. 6th.
Fallow, Martin.....	12 De Kalb Av.
Ferguson, Terence F.....	334 5th Av.
Fitzpatrick, William J.....	271 10th.
Fitzsimmons, Peter.....	200 Columbia.



## BROOKLYN—Continued.

Fletcher, Edward.....	85 Wythe Av.
Flick, W. J.....	21 Atlantic Av.
Foley Bros.....	11 Nassau.
Forabrey, James.....	698 De Kalb Av.
Fox, P. J.....	66 Hudson Av.
Froelich, C. & Son.....	154 Ewen.
Gaff & Nathans.....	694 Fulton.
Galbally, William.....	143 Park Av.
Gallagher, Patrick.....	451 3rd Av.
Gannon & Hueston.....	4 Hoyt.
Garvey Bros.....	114 Court.
Gateson, E.....	64 4th.
Gfroehrer & McCarty.....	492 Grand.
Gilmour, George.....	89 Orange.
Girgetti, Rob. r. l. s.....	949 Broadway.
Goodman, John.....	140 Court.
Graham, Wm.....	211 Manhattan Av.
Grant, James.....	20 Vanderbilt Av.
Gunning, George.....	100 Orange.
Harahan, Michael.....	725 3rd Av.
Hanley, James.....	288 Flatbush Av.
Harrington, Thos. F.....	334 De Kalb Av.
Hart, Alfred.....	1552 Fulton.
Hartigan, John F.....	1546 Fulton.
Hartman, Henry S.....	324 Court.
Harvey, S. J.....	125 S. 3rd.
Hawkes, Henry.....	425 Flatbush Av.
Hayward, Edwin.....	41 Flatbush Av.
Healy, Martin.....	7 Putnam Av.
Her on, John J.....	158 Court.
Hill & Maguire.....	1730 Fulton.
Hinch, William H.....	348 Jay.
Hogan, Daniel M.....	231 Smith.
Horton, Geo. B.....	470 Grand.
Horan, John.....	Broadway, nr. Gates Av.
Hosford, James.....	422 Gates Av.
Hosford, Wm. J.....	460 Fulton.
Hudson, Thomas.....	1 York.
Hutchinson, F. A., & Co.....	334 Myrtle Av.
James, Geo. S.....	1088 Fulton.
Kaile, John P.....	249 Degraw.
Keating, Geo. H.....	135 Wythe Av.
Keegan, Wm.....	634 3rd Av.
Keenan, James.....	944 Fulton.
Keenan, John J.....	327 Hudson Av.
Keenan, James.....	948 Fulton.
Keil, Patrick.....	15 De Kalb Av.
Kelly, James.....	873 Broadway.
Kelly, John W.....	99 Smith.
Kelly, Thomas.....	758 Myrtle Av.
Keogh, Edward.....	482 Court.
Kimball, S. B.....	619 De Kalb Av.
Lewis, George.....	660 Fulton.
Loan, Joseph.....	280 Myrtle Av.
Lord, John.....	632 Bedford Av.
Luckey, John.....	1157 Fulton.
Lyons, Mortimer J.....	16 Hicks.
McArdell, J. W.....	154 Jay.
McBride, Bernard.....	101 York.
McAleamount, Stewart L. B.....	142 Hall.
McCloskey, Geo. M.....	191½ Atlantic Av.
McCormick & Knox.....	97 Broadway.
McCrossan, Thomas.....	950 Gates Av.
McTae & Van Nostrand.....	410½ Gates Av.
McDonald, Arch.....	696 Myrtle Av.
McDonald, Wm.....	83 Cranberry.
McEntee, Patrick.....	20 Ralph Av.
McGarvey, Alex.....	140 Vanderbilt Av.
M Keever, Stephen W.....	95 Washington.
McKeon, Daniel.....	572 Myrtle Av.
McLaughlin & Stump.....	255 Van Brunt.
McLeay, Thos. W.....	837 Gates Av.
McMahon, M.....	70 Summit.
McNamara, Edward.....	133 Broa way.
McNamara, James.....	125½ Sands.
McNulty, James F.....	197 Joralemon.
Macdonald, Edward.....	1301 Myrtle Av.
Maguire, Michael.....	1730 Fulton.
Malone, Martin.....	855 Myrtle Av.
Manneschmidt, Jacob.....	126 Hopkins.
Marshall, George.....	125 S. 3rd.
Matthews, John T.....	288 Division Av.
Meehan, James J.....	494 Myrtle Av.
Mentzinger, C. F. & T. D.....	191 S. 8th.
Meyer, Peter W.....	325 Adams.
Milne, P. Jr.....	189 Montague.
Milne, Robert.....	111 Atlantic Av.

## BROOKLYN—Continued.

Moffatt, P. M.....	111 4th E. D.
Moody, John R.....	264 Carlton Av.
Munkenbeck, Thos. T.....	94 Hamilton Av.
Murray, Peter.....	639 6th Av.
Mutell, Robert.....	81 President.
Nash, Thomas, Jr.....	174 Graham.
Noble, Harry M.....	1423 Fulton.
O'Brien, John.....	371 Hoyt.
O'Keefe & McKenna.....	473 6th Av.
Olney, James B.....	207 S. Oxford.
Pallas, Alex.....	339 Smith.
Palmer, Geo.....	65 Greenpoint Av.
Paterson, John.....	660 Fulton.
Patten, J. Jr.....	59 Greenpoint Av.
Pelletreau, Francis J.....	17 Bond.
Percy, Henry.....	106 Union.
Pitt, Thomas.....	69 6th Av.
Pitt, William.....	233 Flatbush Av.
Post, Philip.....	1956 Fulton.
Powers, Jas. J.....	99 Pineapple.
Quick, H. H.....	581 De Kalb Av.
Radcliffe, Thos. H.....	826 Fulton.
Read, Thomas.....	822 Fulton.
Reid, Barnard R.....	569 Myrtle Av.
Reid, Hugh.....	113 Flatbush Av.
Rhodes, W. P. & Son.....	155 S. Oxford.
Robb, James R.....	1185 Fulton.
Robb, Ralph.....	101 5th Av.
Robins, Chas.....	1361 Fulton.
Roche, W. J.....	62 Henry.
Salt, Thomas.....	275 Washington.
Salt, W. E.....	275 Washington.
Samuels, Benj.....	108 Atlantic Av.
Sawkins, Oscar O.....	357 Court.
Schaefer, Joseph.....	768 Park Av.
Schirmmeister, C.....	5 Whipple.
Schmitt, George.....	54 Summer Av.
Schott, Frederick.....	60 Clymer.
Schroeder, G. H.....	832 Fulton.
Scollay, John A.....	76 Myrtle Av.
Secor, Eugene.....	159 Wythe Av.
Sharkey, John.....	973 De Kalb Av.
Shaw, T.....	587 5th Av.
Sheehan, John.....	200 Greenpoint Av.
Sims, P. H.....	380 Atlantic Av.
Sleeper, Wm. H.....	808 Broadway.
Smith, Michael.....	395 rd E. D.
Smith, Peter T.....	368 De Kalb Av.
Smith, Robert.....	848 Broadway.
Smith & Wright.....	96 Cranberry.
Stiles, Henry L.....	973 Fulton.
Storey, W. H.....	175 Reid Av.
Styne, Nicholas.....	252½ Tompkins Av.
Sullivan, John F.....	1804 Fulton.
Thatcher, S. J.....	638 5th Av.
Thompson, A. M.....	192 Manhattan Av.
Toohill Bros.....	37 Hamilton Av.
Tracey, Geo. F.....	691 Myrtle Av.
Tracey & Heslin.....	405 Bedford Av.
Tragman, Dick.....	281 1st E. D.
Unterreiner, Joseph.....	342 Bushwick Av.
Wagner, Charles.....	49 Varet.
Wagner, William.....	539 Bushwick Av.
Wakefield, James.....	263 Jay.
Walker & Woods.....	38 Myrtle Av.
Walsh, Thos. J.....	468 Myrtle Av.
Wamsley, Joseph H.....	564 Manhattan Av.
Weinberger, H. A.....	149 Wythe Av.
Weller, L.....	937 Gates Av.
White & Herrmann.....	621 Pacific.
Whitehouse, J.....	1135 Fulton.
Wilkins, Joseph D.....	228 Broadway.
Williams, Chas. W.....	657 Broadway E. D.
Williams, George.....	921 Fulton.
Williams, Granville F. F.....	198 Joralemon.
Williams, Henry.....	404 Broadway.
Wilson, John.....	348 Jay.
Wilson, Theodore C.....	417 Carlton Av.
Wilson, W.....	284 Broadway.
Wood, George.....	14 Flu-hing Av.
Woods, Thos. H.....	415 Hudson Av.
Zoeller & Son.....	86 Johnson Av.
Zoll, Joseph & Co.....	113 Leonard.

## SHIPSMITHS.

Brown, Geo. J.....	143 West.
Crowley & Bradley.....	129 Conover.

**BROOKLYN—Continued.**

Ewatts, Louis F.,.....628 Manhattan Av.  
 Horne, James,.....411 Van Brunt.  
 Langill, John L.,.....17 Summit.  
 O'Keefe, Edward,.....40 Congress.  
 Pennington, John,.....Elizabeth nr. Richards.  
 Penso, Gilbert,.....131 Conover.  
 Robert, William,.....69 Furman.  
 Spencer & Deane,.....11 Summit.  
 Stiglens, John,.....131 Conover.  
 Sullivan, Samuel,.....16 Columbia.  
 Van Cleaf, David Jr.,.....9 Summit.

**MISCELLANEOUS.**

Annin & Co., Mfr. Iron Pipe, &c.,.....2 to 6 Water.  
 Arthur, Wm. & Co.,.....Engine Builders.  
 Adams and Water.  
 Bayne & McGregor, Engine Builders, 30 Franklin.  
 Bohannon, Wilson,.....Mfr. Locks.  
 Broadway cor. Kosuth.  
 Bolla, Thomas, Mfr. Files,.....62 Skillman Av.  
 Bommer, L., Mfr. Hardware,.....84 Pearl.  
 Boone, W. C. & Son,.....Mfrs. Screws.  
 Park Av. cor. Sandford.  
 Brandeis & Son,.....Mfrs. Plumbers' Supplies,  
 46 Fulton.  
 Brehler, David, Mfr. Locks,.....239 Montrose Av.  
 Brooklyn Bra-s & Copper Co., Mfrs. Brass Goods.  
 Pearl cor. Front.  
 Callmeyer & Co., Mfrs. Bolts,.....308 Greenpoint Av.  
 Carver, John, Mfr. Hardware,.....44 N. 3rd.  
 Carver, Wm., Mfr. Tools,.....1111 Broadway.  
 Chaffee, Wm.,.....Mfr. Files.  
 King-land Av. cor. Meeker Av.  
 Chrome Steel Co., Mfrs. Steel, Kent Av. cor. Keep.  
 Clayton, James,.....Mfr. Steam Pumps.  
 14 and 16 Water.  
 Clunan, James,.....Machinists' Supplies.  
 1563 Atlantic Av.  
 Cobb, D. B.,.....Engine Builder.  
 Summit cor. Van Brunt.  
 Connolly, Patrick, Plumbers' Supplies, 351 Adams.  
 Cregue, Rolands & Co.,.....Plumbers' Supplies.  
 43 Boerum Place.  
 Daniels, Wm., Millwright,.....55 Atlantic Av.  
 Davidson Steam Pump Co.,.....45 Keep.  
 Dietz, Alonzo E., Mfr. Locks,.....69 Clymer.  
 Dunlap, Chas. W., Mfr. Hardware,.....249 Plymouth.  
 Eaton, Geo. S., Metal Spinner,.....14 Dunham Place.  
 Farrington, John M. & Co.,.....Mfrs. Hardware.  
 21 N. 9th.  
 Fellows, John, Mfr. Screws,.....70 Broadway.  
 Fitzgerald, John, Millwright,.....240 Plymouth.  
 Flick, W. J., Sheet Iron Worker,.....21 Atlantic Av.  
 Gorman, Jas., Mfr. Iron Railings, 30 Flatbush Av.  
 Graham, A., Mfr. Nails,.....65 N. 1st.  
 Hardick, Chas. R.,.....Mfr. Steam Pumps.  
 118 Plymouth.  
 Hauck, Chas. J. & Son,.....Metal Spinners.  
 36 Stagg.  
 Hendrickson, E. M. & Sons,.....Mfrs. Safes.  
 15 N. Oxford.  
 Hill, Samuel L. & Son,.....Mfrs. Locks,.....104 S. 4th.  
 Holden, E. J. & Co., Mfrs. Saws & Files,.....38 Devoe.  
 Hyatt, Wm. F., Mfr. Brass Goods,.....254 State.  
 Ibbotson, John, Mfr. Files,.....466 Broadway.  
 Jamer, Jacobs & Co.,.....Plumbers' Supplies.  
 148 1st E. D.  
 Jaques, Samuel,.....Engine Builder,  
 296 1/2 Bedford Av.  
 Jones, William, Millwright,.....28 Atlantic Av.  
 Judd, H. L. & Co., Mfrs. Hardware,.....44 State.  
 Kermode, W. H.,.....Mfr. Iron Railings.  
 957 1/2 Myrtle Av.  
 Kimball, S. R., Plumber's Materials,.....619 De Kalb.  
 Kimber, Geo. D. & Son,.....Plumbers' Materials.  
 15 Nassau.  
 Kohlman, Peter, Mfr. Nails,.....492 Lorimer.  
 Kohn, S. H., Steel Works,.....Kent Av. cor. Keep.  
 Lang, W., Mfr. Brass Goods,.....136 1st E. D.  
 Lonsbury & Co., Mfrs. Bolts,.....63 Freeman.  
 McElroy, Patrick, Mfr. Nails,.....243 1st E. D.  
 McCracken, Daniel,.....Mfr. Hardware.  
 205 Bushwick.  
 McShane, Henry & Co.,.....Plumbers' Supplies.  
 50 Myrtle Av.  
 Mancer, W. H., Mfr. Files,.....358 N. Second.

**BROOKLYN—Continued.**

May, Sylvester, Mfr. Gas Fixtures,.....225 State.  
 Meier, Theodore, Metal Spinner,.....331 Adam.  
 Mitchell Bros., Plumbers' Materials,.....613 Monroe.  
 Monks, Charles, Mfr. Tool,.....190 16th.  
 Murcott & Campbell, Mfrs. Files,.....130 Freeman.  
 Murray, Owen, Mfr. Tools,.....78 John.  
 Nicoll, Wm., Plumbers' Supplies,.....16 High.  
 O'Connell, M. Mfr. Bolts,.....136 Sandford.  
 O'Leary, John, Mfr. Nails,.....54 Bolivar.  
 Paul, Chas. B., Mfr. Files,.....182 10th E. D.  
 Peace, Harvey W. & Co., Mfr. Saws,.....189 10th E. D.  
 Perry, John T., Mfr. Files,.....260 Broadway.  
 Pollard, Joseph G., Mfr. Tools,.....141 Raymond.  
 Prescott, Martin, Mfr. Gas Fixtures,.....127 Grand.  
 Preston, H. & Co., Mfrs. Bolts,.....63 Freeman.  
 Proctor, Geo., Mfr. Tools,.....318 1st E. D.  
 Reinhardt, Chas., Mfr. Scales,.....72 Stagg.  
 Renhoff, Chas., Metal Spinner,.....131 1st E. D.  
 Ridgewood Mfg. Co.,.....Engine Builder.  
 ft. Elizabeth.  
 Rowland, F. E., Iron Works,.....West, cor. Colyer.  
 Sankey, Julius F., Mfr. Tools,.....89 Johnson Av.  
 Schlinger, John, Mfr. Hardware,.....160 Gwinnett.  
 Schmitz, William, Mfr. Tools,.....46 Montrose Av.  
 Schneider, Valentine, Mfr. Files,.....133 Leonard.  
 Seaman & Nichols, Mfrs. Gas Fixtures,.....95 Boerum.  
 Secher, H. G., Millwright,.....438 Gat-s Av.  
 Seelig, M. J. & Co., Zinc Founders,.....117 Mauger.  
 Somers Bros., Mfrs. Brass Goods,.....Front cor. Pearl.  
 Stephen, Thomas, Mfr. Tools,.....231 Butte.  
 Stich, Frederick, Mfr. Tools,.....237 Graham Av.  
 Timmes, Peter, Mfr. Rivets,.....281 N. 6th.  
 Triggs, Richard, Mfr. Gas Fixtures,.....6 Flatbush Av.  
 Upham, V. B. & Co., Mfrs. Rivets,.....Jay cor. John.  
 Vosburgh, W. C. Mfg. Co.,.....Mfrs. Gas Fixtures.  
 273 State.  
 Warwick, Joseph, Mfr. Nails,.....5 Ainslie.  
 Williams, White & Co., Mfrs. Hardware,.....520 Flushing Av.  
 Worthington, H. R.,.....Mfr. Steam Pumps.  
 Rapeleye, cor. Van Brunt.

**BROWNVILLE.**

Cross, I. T.,.....Iron Founder.

**BRUSHTON.**

Barnum, W.,.....Machinist.

**BUFFALO.****BRASS FOUNDERS.**

Bangasser, Frederick, Hubbard, Hardwicke &  
 Bergman, Hy. Ware.  
 Brown, A. H. Jacobowitz, S. M.  
 Collignon, Frank. Lawrence, A. A.  
 Deck Bros. Loewer, Sieber & Strel-  
 Duman & Stregell. cher.  
 Eagle Brass Foundry. McCutcheon, Samuel.  
 Fries & Co. Poh, Louis.  
 Sturm, C.

**COPPERSMITHS.**

Aldrich, S. Kneeland, E. Y.  
 Ballou & Faxon. McBean, Edge & Co.  
 Bean, Felthousen & Co. McCutcheon, Samuel.  
 Caldwell, Wm. Mann, O. W.  
 Cutcheon, Samuel. Peters & Sons.  
 Elsinghorst, J. H. Rathmann, H.  
 Fischer, E. Spitzmiller & Kraft.  
 Herd, B. Storms, James.  
 Hobson, Thos. Striegel & Pax.  
 Kast & Co. Unrlandt, Frank.

**IRON FOUNDERS.**

Adams & Matthews. Hubbell Stove Co.  
 Bergman, Henry. Jewett, Sherman S. &  
 Bingham & Morgan. Co.  
 Childs, Hy. May & Quinn.  
 Dunbar, Robt. & Son. Michigan Stove Co.  
 Ginther, Jacob. Rager, J. W. & Co.  
 Howard, R. L. Tiff, Geo. W. Sons & Co.  
 Hubbard, Hardwicke & Trout, Henry.  
 Ware.

**BUFFALO—Continued.**

**MACHINISTS.**

Alberger, J. L.	Kehr, Geo. H.
Allen, Wm.	Knight, Sisson & Co.
Auerbach, F.	Luekon, Edward.
Barth, John A.	Noye, John T. & Son.
Braunlich, Chas.	Roac, Bros.
Chandler, Henry.	Ross, Josiah.
Collignon, Frank.	Sands, Paul.
Donaldson & Polley.	Shepard, Andrew J.
Dopp, Henry W.	Sniggs, Edward.
Farrar & Trefts.	Sniggs & Co.
Frank & Co.	Squier, Geo. L. & Bro.
Fries, Duman & Co.	Suckon, Edmund.
Hammond & Coon.	Sutton Bros.
Heiser, Wm.	Trout, Henry G.
Holmes, E. & B.	Whitmore & Shoemaker.
Howard Iron Works.	Williams & Alberger.
Justin, Asel A.	

**PLUMBERS, STEAM AND GAS FITTERS.**

Austin, J. C.	Irlbacker & Davis.
Barn & Gieger.	Irr, George.
Bernhardt, Adam.	Irr, Joseph.
Beyer, L. P. & Co.	Kavanagh Bros.
Boedecker, H. P.	Keenan, James.
Bornmuth & Boedecker.	Kennick & Frank.
Bower, Geo. P.	Knepper, John H.
Bradley, Henry, Jr.	Lauer, F. V.
Carr, W. A.	Lawson & Co.
Casper & Steimal.	Lund, W. A.
Claxton, Thomas.	Mensch Bros.
Cook, Edward L.	Morgan, W. F.
Craighill, R. H.	O'Reilly, M. J.
Fox & Mudgett.	Orr, George.
Franke, T. P.	Pagels, John C.
Griffin, John W.	Potts, Frank & Co.
Griffin & S. Hanley.	Renwicke & Franke.
Hagan, Conrad.	Smith, John D.
Hagan & Lauer.	Stygall & Schmitz.
Hannigan, Wm.	Toye, Thomas W.
Hardiker, Wm.	Wannop & Johns.
Harrington, James.	Wilson, Dean.
Huck, Chas. B.	Wilson & Son.
Hurley & Stygall.	Yuhl, F. H.

**MISCELLANEOUS.**

Abbott, Geo. S.	Millwright.
Allen, Z. G.	Millwright.
Amesbury & Swannie.	Mfrs. Saws.
Axe, George.	Mfr. Files.
Bailey, Chas.	Mfr. Files.
Bell, David.	Boiler Maker & Engine Builder.
Bowles, Michael.	Millwright.
Brickell, Wm. & Co.	Mfrs. Files.
Brown, E. J.	Millwright.
Buffalo Hardware Co.	Mfrs. Hardware.
Buffalo Nut & Bolt Co.	
Buffalo Scale Co.	
Buffalo Steam Engine Works.	
Burkhardt, Godfrey.	Mill Machinery.
Carter, John.	Mfr. Files.
Carter, Thomas.	Mfr. Files.
Chamberlain, S.	Machinists' Supplies.
Charles, Edward.	Millwright.
Clark, Bernard.	Boiler Maker.
Clark Mfg. Co.	Mfrs. Hardware.
Colson, F. A.	Pattern & Model Maker.
Cornell Lead Co.	Mfrs. Lead Pipe.
Coyle, James.	Shipsmith.
Cummings Rock Drill Co.	
De Lancy Forge & Iron Co.	
Dempster Engine Works.	
Dixon, W. G.	Plumbers' Supplies.
Donaldson Bros.	Shipsmiths.
Donaldson & Howard.	Boiler Makers.
Doyle, W. L.	Mfr. Agl. Impls.
Drullard & Hayes.	Mfrs. Iron Pipe.
Dunbar, Robert & Son.	Engine Builders.
Eagle Boiler Works.	Boiler Makers.
Empire State Mfg. Co.	Mfrs. Hardware.
Felthousen, E. G.	Mfr. Sheet Iron.
Firmenich, J. G. & F.	Boiler Makers.
Fowler & Sons.	Iron, &c.
Francis Axe Co.	
Giesser, Gabriel.	Mfr. Cutlery.
Gilbert Car Works.	
Griffiths, W. H. & Co.	Galvanized Iron Works.

**BUFFALO—Continued.**

Hendwick & Ware.	Plumbers' Supplies.
Hayes, James V.	Machinery.
Hedstrom, E. L.	Iron, &c.
Hermann, Henry.	Mfr. Cutlery.
Industrial Tool Co.	Mfrs. Tools.
Jetter & Bros.	Mfrs. Files.
Jones, Geo. & Sons.	Mfrs. Iron Fence.
Keith E.	Pattern & Model Maker.
Kiener, John.	Mfr. Plows.
King Iron Works.	Engine Builders.
Kinnear & Oehler.	Shipsmiths.
Kip, Henry W.	Mfr. Hammers.
Knight, Sisson & Co.	Engine Builders.
Kurth & Howell.	Machinery.
Laudenbacker, F.	Mfr. Britannia Ware.
Loewer, Sieber & Striecher.	Mfrs. Locks.
McNaughton, Daniel.	Shipsmith.
Maischoss, Peter.	Mfr. Files.
Maischoss Bros.	Mfrs. Files.
Mills, J. H.	Mfr. Springs.
Moerschfelder, N.	Mfr. Cutlery.
Nelson, Charles.	Boiler Maker.
New Era Gauge Co.	
Newman, W. H. H. & Co.	Iron, &c.
Niagara Stamping & Tool Co.	Mfrs. Presses.
Punches, &c.	
Niagara River Iron Co.	Mfrs. Iron.
Nolan, James.	Mfr. Awns.
Oliver, W. W.	Mfr. Tools.
Ormsby, Alex.	Iron, &c.
Packard, A. J.	Iron, &c.
Palen & Burns.	Iron, &c.
Parkes, Thomas.	Mfr. Bolts & Nuts.
Parr, Mrs. Sarah M.	Tools & Machinery.
Perry, Wm.	Boiler Maker.
Pitts Agricultural Works.	
Plum, Benedict & Barnard.	Mfrs. Bolts & Nuts.
Pratt & Co.	Iron, &c.
Pratt & Letchworth.	Malleable Iron Works.
Ritter, Margaret.	Boiler Maker.
Scoville, J. & N. C.	Mfrs. Car Wheels.
Scutt, H. B. & Co.	Mfrs. Iron Railings.
Seymour, J. A.	Mfr. Mill Picks.
Shamp. Geo. W.	Pattern & Model Maker.
Shaw, Geo.	Mfr. Steam Pumps.
Shepard Hardware Co.	Mfrs. Hardware.
Shoop, Charles.	Pattern & Model Maker.
Smith, J. E. & Son.	Engine Builders.
Smith, Cant & Co.	Iron, &c.
Starbird, Geo. B.	Mfr. Iron Railings.
Sutton & Wood.	Boiler Makers.
Taylor & Co.	Mfrs. Nuts & Bolts.
Trallis, Frank.	Metal Spinner.
Union Iron Co.	Rolling Mill.
Val, Allen.	Buffalo, New York & Phila. R. R.
Valentine & Son.	Mfrs. Locks.
Volker, D. L.	Pattern & Model Maker.
Walz, Francis.	Pattern & Model Maker.
Weeks & Ray.	Mfrs. Scales.
Wheeler & Davis.	Mfrs. Chains.
White, L. & I. J.	Mfrs. Edge Tools.
Wilson, G. R. & Co.	Iron, &c.

**BURDETT.**

Gerowe, W. C.	Machinist.
---------------	------------

**BURLINGTON FLATS.**

Dyer, L. H.	Mfr. Agl. Impls.
Hawkins, V. B.	Millwright.
Pope, T. J.	Mfr. Edge Tools.

**BYRON.**

McElver, James.	Iron Founder.
-----------------	---------------

**CADYVILLE.**

Nicholls & Hull.	Iron, &c.
------------------	-----------

**CAIRO.**

Paddock & Egbert.	Mfrs. Agl. Impls.
-------------------	-------------------

**CALEDONIA.**

Curtis, C. F.	Mfr. Plows.
Miller, Alex., & Son.	Mfrs. Plows.
Wilder Chilled Plow Co.	Mfrs. Plows.

**CAMBRIDGE.**

Walsh, Arthur.	Machinist.
----------------	------------

**CAMDEN.**

Percival, W. G. .... Millwright.  
Wood Bros. & Percival... Founders & Machinists.

**CAMILLUS.**

Hutchings, W. .... Machinist.

**CANAAN CENTRE.**

Ford, Robert R. .... Mfr. Agrl. Impls.

**CANAJOHARIE.**

Carter, H., & Sons. .... Mfrs. Agrl. Impls.  
Miller, C. W. .... Machinist.  
Stevens, W. J. .... Machinist.

**CANANDAIGUA.**

Hawley, John W. .... Mfr. Agrl. Impls.  
Hopkins, Charles S. .... Steam Fitter.  
Mack, W. J. .... Machinist.  
Robinson, John S., & Son. .... Mfrs. Plows.  
Stark, H. F. .... Iron Founder.

**CANASTOTA.**

Canastota Knife Manufacturing Co  
Coon Bros. & Co. .... Mfrs. Threshing Machines.  
Montrose Knife Co. .... Mfrs. Mower Knives.

**CANDOR.**

Booth, E. A., & Co. .... Iron Founders.

**CANISTEO.**

Krogh, N. D. .... Boiler Maker.  
Murphy, Robert. .... Mfr. Agrl. Impls.  
Van Orman, J., & Co. .... Iron Founders.

**CANTON.**

Barlow, W. B. .... Machinist.  
Fowler, Milton. .... Mfr. Axes.  
Jones, David M. .... Iron Founder.  
Storrs, L. B. .... Iron Founder.

**CARLISLE.**

Dwelly, George B. .... Iron Founder.

**CARLTON.**

Rick, A. K. .... Machinist.

**CARTHAGE.**

Carthage Iron Co. .... Mfrs. Iron.  
Empire Steam Pump Mfg. Co.  
Fuller, Norman J. .... Machinist.  
Rytner & Pringle. .... Iron Founders.

**CASTILE.**

Calkins, R. N. .... Machinist.  
Castile Agricultural Works.  
Cummings H. L. .... Machinist.  
Hoagland, Cummings & Co. .... Iron Founders.

**CATO.**

Allanson, W. A. .... Machinery.  
Dutton, E. Q. .... Iron Founder.

**CATSKILL.**

Jones, H. T. .... Plumber.  
Lewis P. C. Mfg. Co. .... Mfrs. Steam Pumps.  
Reed, James. .... Mfr. Pistols.  
Willsie, B., & Co. .... Founders & Machinists.

**CAZENOVIA.**

Card, M. E. .... Machinist.  
Crawford & Co. .... Machinists.  
Hath, W. W. .... Mfr. Knives.  
Marshall, J. W. .... Machinist.

**CEDARVILLE.**

Smith, L. D. .... Machinist.

**CENTRAL BRIDGE.**

Campbell, S. K. .... Machinist.

**CHAMPLAIN.**

Champlain Agricultural Works.  
Doolittle, Hiram L. .... Mfr. Agrl. Impls.

**CHARLOTTE.**

Charlotte Iron Works. .... Mfrs. Iron.

**CHASEVILLE.**

Seward, J. B. .... Mfr. Agrl. Impls.  
Swartout, James. .... Machinist.

**CHATHAM.**

Chatham Machine Works. .... Machinists.  
Hurburt, George H. .... Mfr. Agrl. Impls.

**CHATHAM VILLAGE.**

Chatham Furnace Co. .... Mfrs. Iron.  
Drumm, G. E., & Co. .... Iron Founders.

**CHAUTEAUGAY LAKE.**

Chauteaugay Iron Co. .... Mfrs. Iron.

**CHESTER.**

Rites, Frank. .... Machinist.

**CHITTENANGO.**

Walrath, Peter. .... Iron Founder.

**CHURCHVILLE.**

Cumming & Turner. .... Iron Founders.

**CIRCLEVILLE.**

Wilkinson, Hiram. .... Machinery.

**CLARENCE.**

Metz & Blocher. .... Mfrs. Agrl. Impls.

**CLAY.**

Potter, Hiram. .... Machinist.

**CLAYBURG.**

Tremblay, Peter. .... Mfr. Iron.  
Williams, A. .... Mfr. Iron.

**CLAYTON.**

Brooker, Albert. .... Shipsmith.

**CLAYVILLE.**

King, A. H. .... Iron Founder.  
Millard, S. A., & Co. .... Mfrs. Edge Tools.

**CLIFTON.**

Gaffney, Joseph H. .... Plumber.

**CLINTON.**

Bronsen & Padden. .... Iron, &c.

**CLINTONVILLE.**

Peru Steel & Iron Co.

**CLOCKVILLE.**

Patton & Stafford. .... Mfrs. Agrl. Impls.

**CLOVE VALLEY.**

Clove Spring Iron Co. .... Mfrs. Iron.

**CLYDE.**

Wood, S. W., & Co. .... Steam Engines.

**CLYMER.**

Knowlton, J. B. .... Mfr. Horse Rakes.

**COBLESKILL.**

Harder, Minard. .... Mfr. Threshing Machines.  
Waldron, Edward. .... Iron Founder.

**COHOCTON.**

Streety, B. R. .... Machinist.

**COHOES.**

Bottom, George L. .... Plumber.  
Bottom & Lancaster. .... Plumbers.  
Campbell & Clute. .... Machinists.  
Cohoes Axe Mfg. Co.  
Cohoes Iron Foundry & Machine Co.  
Cohoes Rolling Mill. .... Mfrs. Bar Iron.  
Curtis, A. G., & Co. .... Mfrs. Iron Pipe.  
Empire Tube Works. .... Mfrs. Iron Pipe.  
Harrobin, W. T., & Co. .... Iron Founders.  
Johnston, R. .... Iron Founder.  
Kavanagh, L. .... Machinist.  
McCreary, John. .... Machinist.  
Maguire & Cady. .... Plumbers.  
Morrison, Colwell & Page. .... Rolling Mill.  
Peck, Alfred G., & Co. .... Mfrs. Edge Tools.  
Roberts & Williams. .... Plumbers.  
Ten Eyck & Laughlin. .... Mfrs. Axes.  
Tubbs & Humphreys. .... Machinists.  
Weed & Becker Mfg. Co. .... Mfrs. Edge Tools.  
Wilson, Thos. G. .... Gas Fitter.

**COLD BROOK.**  
Stillman Bros.....Machinists.

**COLD SPRING.**  
Camp, F. M.....Plumber.  
Paulding, Kembie & Co.....Iron Founders.

**COLLEGE POINT.**  
Sheridan, P. C.....Plumber.

**COLLINS CENTRE.**  
King Bros.....Mfrs. Agrl. Impl'ts.

**COLTON.**  
Holmes, C. W.....Machinist.

**CONQUEST.**  
Campbell, Irving.....Machinist.

**CONSTABLEVILLE.**  
Eames, Morris J.....Machinist.

**COOPERSTOWN.**  
Bowes, J.....Plumber.  
Lamb, J. Warren, & Co.....Gas Fitters.

**COPAKE IRON WORKS.**  
Miles, Fred.....Mfr. Plows.

**COPENHAGEN.**  
Slater, S. E.....Iron, &c.

**CORNING.**  
Hungerford Iron Railroad Tie Mfg. Co.  
Payne, B. W. & Son.....Iron Founders.  
Preston & Heerman.....Machinists & Founders.

**CORNWALL.**  
Wiley, T. M.....Machinist.

**CORNWALLVILLE.**  
Waldron, Wm.....Machinist.

**CORONA.**  
Alexander & Brock.....Mfrs. Pipe Tong.  
Koeppen, E.....Machinist.  
Schilling, Geo. F.....Plumber.

**CORTLAND.**  
Bates & Hollister.....Plumbers.  
Cortland Foundry & Machine Co.  
Cooper Bros.....Iron Founders.  
Kellogg, H. M.....Gas Fitter.  
Kirk, H., & Co.....Gas Fitters.  
Mallery, E. D.....Plumber.  
Seager, S., & Son.....Machinists.  
Smith & Kingsbury.....Plumbers.

**COWLESVILLE.**  
Dogg, tt & Co.....Iron Founders.

**COXSACKIE.**  
Coxsackie Malleable & Gray Iron Co.  
Graham, Chas. H.....Iron, &c.  
Newbury, Bolivar.....Iron Founder.  
Richardson, S. W.....Mfr. Iron.  
Winegar, Oscar.....Iron Founder.

**CROGHAN.**  
Tiss, Peter.....Machinist.  
Valin, James A.....Machinist.

**CROPSEYVILLE.**  
Bailey, A.....Mfr. Agrl. Impl'ts.

**CROTON LANDING.**  
Talcott, W. E., & Co.....Machinist.

**CROWN POINT.**  
Bly, Norman.....Machinery.  
Crown Point Iron Co.....Mfrs. Iron.  
Mason Wheel Co.....Machinery.

**CUBA.**  
Randolph, S. S.....Machinist.  
Robertson, S. W., & Sons.....Iron Founders.

**DANVILLE.**  
Gilman, E. B., & A. J.....Iron Founders.  
Locking, L. N.....Mfr. Plows.  
Sweet, Faulkner & Co.....Mfrs. Mowers. & Reaper.

**DARIEN.**  
Cowan, W. N.....Machinist.

**DAYTON.**  
Hall, H. P.....Millwright.

**DEER RIVER.**  
Kidney, T. L.....Mfr. Plows.  
Lamphere, O. A.....Mfr. Agrl. Impl'ts.

**DELHI.**  
White, Mortimer & Co.....Founders & Machinists.

**DELPHI.**  
Salisbury, John.....Mfr. Axes.

**DEPOSIT.**  
Blatchley, A. P.....Iron Founder.  
Davis, A. R.....Machinist.  
Snyder, Ira.....Mir. Axes.

**DE RUYTER.**  
Crumb, J. H.....Founder & Machinist.

**DOBB'S FERRY.**  
Hamill, Rachael.....Plumber.  
McIlveen, Thos.....Plumber.

**DOVER FURNACE.**  
Schaparon Iron Works.

**DRESDEN.**  
Whipple & Smith.....Mfrs. Steam Engines.  
Young, Seth.....Machinist.

**DUNDEE.**  
Goble, Charles, Bros.....Iron Founders.  
Mauncer, John.....Plumber.  
Terry Mfg. Co.....Mfrs. Hinges.

**DUNKIRK.**  
Brook's Locomotive Works.  
Buell, Albert F.....Steam Fitter.  
Clark, Whitman.....Millwright.  
Fletcher, Thomas.....Machinist.  
Haggatt, J. C.....Dunkirk, Allegheny Valley & Pitts-  
burg R. R.  
Horch, Henry.....Plumber.  
Howard Bros. & Rise.....Machinists.  
McDougall & Avery.....Steam Fitters.  
Mulholland Spring Co.....Mfrs. Springs.  
Perry, E. C., & Co.....Plumbers.  
Rice & Fell.....Machinists.  
Sellen & Popple.....Engine Builders.

**EAGLE BRIDGE.**  
Pruyn, Henry S.....Mfr. Agrl. Impl'ts.

**EAGLE MILLS.**  
Lane & Allen.....Mfrs. Agl. Impts.  
Uline, T. H.....Iron Founder.

**EAGLE VILLAGE.**  
Williams, Lyman L.....Machinist.

**EAST AURORA.**  
Darbee & Peck.....Iron Founders.  
Paine, T.....Machinist.

**EAST BLOOMFIELD.**  
Bradley, C. W. & Co.....Mfrs. Agl. Impts.  
Mead, W. H.....Millwright.

**EAST BOSTON.**  
Soper, W. P.....Mfr. Agl. Impts.

**EAST CONCORD.**  
Titus, James B.....Millwright.

**EAST KOY.**  
Campbell Bro'.....Mfrs. Agl. Impts.

**EAST NEW YORK.**  
Bryant, H.....Plumber.

**EAST OTTO.**  
Sikes Bros.....Mfrs. Agl. Impts.

**EAST RANDOLPH.**  
Benedict, Samuel J.....Iron Founder.  
Hall, E. & H. J., Jr.....Machinist.

**EAST WORCESTER.**

Woldrap, Harvey.....Iron Founder.

**EATON.**

Wood, Taber &amp; Morse.....Engine Builders.

**EDINBURGH.**

Butler, C. D. &amp; Son.....Machinists

**EDMESTON**

Green, N. L.....Iron Founder.

**ELBA.**

Barr, Frank.....Machinist.

Barr, P., Jr.....Machinist.

French &amp; Rugg.....Mfrs. Bolts &amp; Nuts.

Staples, J. A. &amp; Co.....Mfrs. Bolts &amp; Nuts.

**ELK CREEK.**

Nellis, George.....Machinist.

**ELLENVILLE.**

Bloomen &amp; Co.....Machinists.

Devine, Dwight.....Mr. Cutlery.

Hulse, L. W.....Plumber.

Wepfer &amp; Camner.....Iron Founders.

**ELLICOTTSVILLE.**

Good-peed, Wm.....Mfr. Agl. Impts.

Harnes, F. F.....Machinist.

Rust Bros.....Machinists.

**ELLINGTON.**

Hamon, Henry.....Machinist.

**ELMIRA.**

Andrews, J. H.....Mfr. Saws.

Booth, Irving.....Iron, &amp;c.

Campbell &amp; Hay.....Plumbers.

Coleman, I. B.....Machinist.

Cooke, E. H. &amp; Co.....Plumbers &amp; Steam Fitters.

Davis (The) Improved Wrought Iron Wheel Co.

Dounce, W. J. &amp; Co.....Iron, &amp;c.

Elmira Iron &amp; Steel Rolling Mill Co.

Gillett &amp; Co.....Mfrs. Edge Tools.

Gridley, G. A. &amp; Son.....Plumbers.

Gridley &amp; Underhill.....Plumbers.

Hay, John.....Plumber.

La France Fire Engine Co.

Reid &amp; Cooper.....Iron Founders.

Rhymer, H. B.....Mfr. Files.

Stader, J.....Mfr. Agl. Impts.

Swift, A. W.....Mfr. Engines.

Thomas, W. B.....Machinist.

Underhill, Henry C.....Plumber.

Walker, J. &amp; B. H.....Plumbers.

Waugh, Mrs. E. R.....Machinist.

**ELM PARK.**

Smith, James.....Plumber.

**ERIEVILLE.**

Purdy, Monmouth.....Mfr. Agl. Impts.

**ESOPUS.**

Kay, Geo. &amp; Son.....Mfrs. Cutlery.

**ESPERANCE.**

Settle, Wesley.....Machinist.

Van Vechten, James.....Iron Founder.

**ESSEX.**

Essex Horse Nail Co.

Harrington, James.....Machinist.

Robinson, A. B.....Machinist.

Wil-on, W.....Machinist.

Woodford, H. E.....Machinist.

**ETNA.**

Bartholomew, Caleb.....Iron Founder.

**EUCLID.**

Washburn, P.....Iron Founder.

**FABIUS.**

Bennett &amp; Bramer.....Machinists.

**FAIRFIELD.**

Phillips, A. W.....Machinist.

**FARMER VILLAGE.**

Ryno, John.....Iron Founder.

**FARNHAM.**

Sprague, W.....Machinist

**FAYETTEVILLE.**

Beard, H.....Iron Founder.

Fayette ville Knife Co.....Mfrs. Knives.

Morgan, Russell.....Mfr. Agl. Impts.

**FISHKILL-ON-THE-HUDSON.**

Fishkill Landing Machine Co.

Redman, John.....Plumber.

**FLATBUSH.**

Jarrett &amp; Terry.....Sheet Iron Workers.

**FLUSHING.**

Bogert &amp; Grant.....Machinists.

Darmour, James F.....Plumber.

Diamond &amp; Boardman.....Iron Founders.

Elliott, Thomas.....Plumber.

Flushing Iron Co.

**FLY CREEK.**

Shepard, Wm.....Machinist.

**FORESTVILLE.**

Pierce, Levi J.....Machinery.

**FORT COVINGTON.**

Wright, Albion.....Machinery.

**FORT EDWARD.**

George, A. M.....Plumber.

Osgood, John.....Iron Founder.

**FORT PLAIN.**

Failing, Rufus.....Iron Founder.

Lake &amp; Wood.....Iron Founders.

Walrath, A.....Machinist.

Wood, Smith &amp; Co.....Mfrs. Springs.

**FOUR MILE.**

Wiser Bros.....Machinists.

**FOWLerville.**

Cranston, H. H. &amp; Co.....Machinists.

Dow, B. F. &amp; Co.....Mfrs. Agl. Impts.

**FRANKFORT.**

Lloyd, D. J.....Machinist.

Steber, B. F.....Machinist.

Taylor, J. A.....Machinist.

**FRANKLIN.**

Dibble, Jackson.....Machinist.

Slade, De Witt.....Iron Founder.

**FRANKLINVILLE.**

Doty &amp; Awls.....Mfrs. Agl. Impts.

Swinton, Wm.....Machinist.

**FREDONIA.**

Buck, H. A.....Machinist.

Clark, H. H.....Machinery.

Howe, J. M.....Millwright.

Wiley, G. W.....Iron Founder.

**FREEPORT.**

Wright &amp; Buland.....Plumbers.

**FRIENDSHIP.**

Butts &amp; Fisher.....Iron Founders.

**FULLERVILLE IRON WORKS.**

Clarke, Geo. H. &amp; Co.....Iron Works.

**FULTON.**

Atwood, John.....Mfr. Chains.

Dilt, Frank.....Founder and Machinist.

Foster, Bros.....Mfrs. Edge Tools.

Ross, E. W. &amp; Co.....Founders and Machinists.

Taylor, Bros. &amp; Co.....Machinists.

Waterman, D. A.....Machinist.

**FULTONVILLE.**

Wemple's, W. B. Sons.....Iron Founders.

**GALLATINVILLE.**

Edleman, Jacob.....Mfr. Edge Tools.  
Hicks & Bruce.....Iron Founders.

**GARDENVILLE.**

Schœpflin J. & Son.....Founders and Machinists.

**GEDDES.**

Gere, R. N.....Iron.  
Life, Chas. E.....Machinist.  
Onondaga Iron Co.....Mfrs. Iron.  
Sanderson, Bros. & Co.....Mfrs. Iron.  
Smith & Warner Foundry Co.  
Straight Line Engine Co.....Engine Builders.  
Syracuse Iron Works.

**GENESEEO.**

Baker & Barclay.....Machinists.  
Hudnutt, E. W.....Machinist.

**GENEVA.**

Ainsley, Alanson.....Mfr. Reapers and Mowers.  
Andrus, M. M.....Plumber and Gas Fitter.  
Baker, A. L.....Iron Works.  
Bennett, Walter K.....Machinist.  
Bungay, Chas.....Machinist.  
Catchpole, A.....Engine Builder.  
Dunning, W. B.....Iron Founder.  
Garrigan, Wm.....Plumber.  
Jameson, R.....Plumber.  
Thomas Smoothing Harrow Co.  
Van Deven, D. G.....Plumber.

**GHENT.**

Snyder, Geo. H.....Mfr. Scales.

**GILBERTSVILLE.**

Mayne, John.....Iron Founder.

**GILBOA.**

Gilbert, Wm. & Co.....Iron Founders.

**GLEN COVE.**

Benham & Stoutenborough.....Mfrs. Sheet Iron.

**GLENDALE.**

Kyle, Anton.....Machinist.

**GLENSDALE.**

Johnson, Warren.....Machinist.

**GLENS' FALLS.**

Boynton, L. D.....Mfr. Saws.  
Brower, S. P. & Son.....Machinists.  
Dix, J. L. & S. B.....Founders and Machinists.  
Guilford & Boynton.....Mfr. Edge Tools.  
Lapham, B. F.....Plumber.  
Miller, Wm.....Millwright.  
Needham, T. H.....Machinist.  
Thomas & Son.....Plumbers.

**GLOVERSVILLE.**

Anthony, H. J. & Co.....Machinists.  
Burns, Robert.....Machinist.  
Curtin, Frank.....Machinist.  
Demarest, W. H.....Plumber and Gas Fitter.  
Dwyer, P. V.....Steam and Gas Fitter.  
Haag, Jacob.....Machinist.  
Harris, W. M.....Machinist.  
Hosmer, Jas. S.....Mfr. Sewing Machines.  
McGuire, Byard.....Iron Founder.  
Newton, Elias P.....Mfr. Tools.  
Palmer, Samuel.....Machinist.  
Putnam, G. V., Fonda, Johnst'n & Gloversville R.R.

**GORHAM.**

Squires, W. A.....Mfr. Agl. Impts.  
Stokes, W. E.....Machinist.  
Thomson & Scott.....Machinists.  
Valentine, Jacob.....Mfr. Agl. Impts.  
Wilson, Bros.....Machinists.

**GOSHEN.**

Goshen Foundry and Gas Machine Co.  
Ray, W. V.....Iron Founder.  
Rider Engine Co.....Mfrs. Steam Engines.  
Tuthill, T. D.....Plumber.  
Van Der Werken, A.....Mfr. Gas Fixtures.

**GOVERNEUR.**

Drake, E. H.....Machinist.  
Gouverneur Machine Co.  
St. Lawrence Mfg. Co.....Mfrs. Agl. Impts.  
Thompson & Hill.....Mfrs. Stoves.  
Williams, O.....Iron Founder.

**GOWANDA.**

Hussey, S.....Mfr. Drills.  
Pipfinger, Fred.....Machinist.  
Romer, Bros.....Mfrs. Axes.  
Russell, John.....Machinist.  
Sellers, A. R. & Co.....Iron Founders.

**GRAFTON.**

Bailey A. & Son.....Mfrs. Agl. Impts.

**GRAND ISLAND.**

Cunningham, Wm.....Machinist.  
Waters, A. A.....Boiler Maker.

**GRANVILLE.**

Potter, Collins.....Millwright.  
Potter, S. G.....Machinist.

**GRASSY POINT.**

Wiles, Alfred M. & W. H.....Machinists.

**GRAVESEND.**

Rafford, E. C.....Plumber.

**GRAVESVILLE.**

Henman, Milo C.....Machinist.

**GREENBUSH.**

Callaghan, Charles.....Iron Founder.  
Lovejoy, E. B.....Mfr. Edge Tools.  
Patterson, Thomas.....Mfr. Nails.

**GREENE.**

Jones, J. K.....Machinist.  
Lyon, G. R.....Iron Founder.  
McMoran, D. M.....Mfr. Knives.

**GREEN ISLAND.**

Corse & Co.....Stove Founders.  
Dwyer, Edward D.....Brass Worker.  
Filley, M. F.....Mfr. Stoves.  
Gilbert & Brush Co.....Car Builders.  
McCoubrey, Albert.....Coppersmith.  
Pinkerton, Robert.....Boiler Maker.  
Powell, W. H.....Stove Founder.  
Torrance, Merriam & Co.....Iron Founders.  
Waters, Andrew A.....Boiler Maker.

**GREENPORT.**

Geehreng, John.....Plumber.

**GREENWICH.**

Eddy, W., & Co.....Iron Founders.  
Safford, Charles H.....Mfr. Iron Fence.  
Weaver, Edward.....Machinist.

**GREENWOOD IRON WORKS.**

Parrott, Peter.....Iron Works.

**GROTON.**

Perrigo, C., & Co.....Founders & Machinists.  
Streeter, N. R., & Co.....Mfrs. Hardware.

**GUILDERLAND.**

Fonda, William.....Iron Founder.

**GUILFORD.**

Bradbury, Andrew.....Founder & Machinist.  
Merchant, A. P.....Machinist.

**HALCOTT CENTRE.**

Van Valkenburgh, A.....Mfr. Agl. Impts.

**HAMBURG.**

Brendell, J. G.....Mfr. Bells.  
Hamburg Axe & Edge Tool Co.  
Hunt, E. O.....Iron Founder.  
Hunt, F. S., & Son.....Mfrs. Agl. Impts.  
Walker, George.....Millwright.

**HAMDEN.**

Adams, George.....Mfr. Agrl. Impls.  
Mallory, William.....Millwright.

**HAMILTON.**

Wilcox, F.....Iron Founder.

**HAMLET.**

Scott, M. D.....Iron Founder.

**HAMMONDSPORT.**

Heckler, J. H., & Sons.....Mfrs. Agrl. Impls.

**HANCOCK.**

Stimson, Theodore.....Iron Founder.

**HANNIBAL.**

Jackson, J. W.....Iron Founder.

**HANNIBAL CENTRE.**

Beed, J. J., & Son.....Machinists.  
Dykeman, W. E.....Iron Founder.

**HARFORD.**

Mather & Tyler.....Mfrs. Agrl. Impls.  
Steele, S. H.....Millwright.

**HARTFORD.**

Norton, Lyman.....Mfr. Agrl. Impls.

**HARPERSVILLE.**

Richards, C. M. & G.....Iron Founders.

**HARTWICK.**

Halbert, M. L.....Mfr. Sheet Iron.  
William, P. G.....Iron Founder.

**HAVANA.**

Dewitt, A. S., & Co.....Mfrs. Agrl. Impls.  
Hall, G. W.....Iron Founder.  
Holmes & Bates.....Iron Founders.  
Shepherd, W. H., & Co.....Iron Founders.  
Whitemore, O. A.....Machinist.

**HAVERSTRAW.**

Peck, John.....Mfr. Iron.  
Vanderburg, E. P.....Machinist.  
Vervalen, R. A. & S. A.....Iron Founders.  
Waldron, Charles.....Machinist.  
Whitney, A. B., & Co.....Iron Works.

**HAYNEVILLE.**

Snyder, John G.....Mfr. Springs.

**HEMPSTEAD.**

Jungst, Daniel.....Mfr. Springs.  
Titus, John.....Machinist.  
Treadwell, George C.....Machinery.

**HERKIMER.**

Rowes, J.....Plumber.  
Klock & Sheaf.....Machinists.  
Quackenbush, H. M.....Machinist.  
Warburton, C. H.....Iron Founder.

**HIGH BRIDGE.**

McNally, M.....New York City & Northern R. R.

**HIGHLAND.**

Davis, William.....Iron Founder.

**HIGHLAND FALLS.**

Simms, William.....Machinist.

**HILLSDALE.**

Mallory, W. A.....Mfr. Plows.

**HOBART.**

Delaware Agricultural Works.  
Robinson, John.....Iron Founder.

**HOLLAND.**

Selleck, Horace.....Mfr. Agrl. Impls.

**HOLLEY.**

Baker, E. J.....Iron Founder.

**HOMER.**

Fisher, Willett.....Iron Founder.  
Stone, A.....Iron Founder & Machinist.  
Westcott, George N.....Iron Founder.

**HONEOYE.**

Vanburen, John.....Iron Founder.

**HONEOYE FALLS.**

Yorks, E. L. & W. R.....Machinists.

**HOOSICK FALLS.**

Eagle Foundry.....Mfrs. Agrl. Impls.  
Hoosick Malleable Iron Works.  
Millington, Frank.....Plumber.  
Peck, E. T.....Machinist.  
Wood, Walter A.....Mowing & Reaping Machine Co.

**HORNELLVILLE.**

Hathaway, Samuel B.....Iron Founder.  
McDugall & Avery.....Steam Fitters.  
Rawson, Solomon.....Iron Founder.  
Rawson Mfg. Co.....Mfrs. Rapers & Mowers.

**HORSEHEADS.**

Bennett, G.....Machinist.  
Bogardus, J.....Machinist.  
Case & Tomlinson.....Machinists.  
Cleveland, George.....Machinist.  
Clipper Chilled Plow Co.  
Shoats, James B.....Plumber.

**HOWES CAVE.**

Cary, J. S.....Millwright.

**HUDSON.**

Capron, E. P. H.....Machinery.  
Clancy, Patrick.....Plumber.  
Clapp & Jones Mfg. Co.....Fire Engine Builders.  
Columbia Iron Co.....Mfrs. Iron.  
Gifford, Bros.....Founders & Machinists.  
Hudson Iron Co.....Mfrs. Iron.  
Hudson, W. H.....Plumber.  
Hunt, Z. M.....Stove Founder.  
Mulrein, Jno.....Plumber & Gas Fitter.  
O'Connell, W. H.....Plumber.  
Parker, Byron.....Gas Fitter & Plumber.  
Smith, John P.....Machinery.  
Tough, Wm.....Mfr. Agrl. Impls.  
Webber, Henry.....Machinist.

**HUNTER'S LAND.**

West & Warrick.....Iron Founders.

**HUNTINGTON.**

Conklin, Geo. W.....Mfr. Agrl. Impls.  
Dodge, Alonzo.....Machinist.

**HYDE PARK.**

Carter, Israel M.....Mfr. Tools.  
Farrington & Green.....Plumbers.

**ILION.**

Haviland & Gunn.....Mfrs. Pi-tols.  
Remington, E. & Son.....Mfrs. Fire Arms, Machinists, &c.  
Schesh, Geo. A.....Plumber.

**INDIAN FIELDS.**

Norris Bros.....Iron Founders.  
Snyder, Caleb.....Iron Founder.

**IRONA.**

Reynolds, J. F.....Iron, &c.

**IRVINGTON.**

Anderson, James.....Plumber.  
Menzies, G. C.....Plumber.  
Wagner, Walton A.....Plumber.

**ITHACA.**

Davis & Co.....Mfrs. Agrl. Impls.  
Dresser, Joseph H.....Machinist.  
Fleck, John B.....Plumber.  
Forbes, A. C.....Boiler Maker.  
Freeman, Waterman & Co.....Machinists.  
Ithaca Mfg. Works.....Mfrs. Agrl. Impls.  
Jamieson, John M.....Gas Fitter.  
Johnson, Chas. D.....Iron Pipe, &c.  
Post & Sharp.....Mfrs. Plows.  
Reynolds & Lang.....Founders & Machinists.  
Seaman, A. M.....Mfr. Tools.  
Williams Bros.....Iron Founders.



**JACKSONVILLE.**

Smith, L. J.....Machinery.

**JAMESTOWN.**

Armitage & Smith.....Plumbers.  
 Brize, Chas.....Plumber.  
 Carpenter & Co.....Mfrs. Edge Tools.  
 Clark, J. H.....Iron Founder.  
 Columbia Grain Drill Co.  
 Harris & Tru sdale.....Mfrs. Agl. Impts.  
 Horton Mfg. Co.....Mfrs. Agl. Impts.  
 Jeffords, Chas. L.....Mfr. Edge Tools.  
 Jones, Solomon.....Mfr. Screws.  
 Maher, Patrick.....Machinist.  
 Morgan, Chas. W.....Plumber.  
 Palmiter, J.....Machinist.  
 Palmiter, Samuel.....Machinist.  
 Phellaplace, J.....Millwright.  
 Smith, John.....Machinist.  
 Smith, J. F.....Plumber.  
 Wells & Gourley.....Machinists.  
 Wells & Whitcomb.....Iron Founders.  
 White & Stevens.....Mfrs. Agl. Impts.

**JAVA VILLAGE.**

Spoooner, Wm.....Machinist.  
 Steele, W. W.....Millwright.

**JAY.**

Rogers, J. & J., Iron Co.....Mfrs. Iron.

**JEFFERSON.**

Dikeman, S. W.....Iron Founder.

**JOHNSONVILLE.**

Lane, Gale & Co.....Mfrs. Eige Tools.

**JOHNSTOWN.**

Colderwood, Alex. C.....Machinist.  
 Johnson Gas Co.....Gas Fitters.  
 Kingsbury, E.....Machinist.  
 McGinnis, J. P.....Plumber.  
 McVoy, John.....Mfr. Files.  
 Titus & Brooks.....Mfr. Edge Tools.  
 Wagner, A.....Machinist.

**JORDAN.**

Peck & Tyler.....Iron Founders & Machinist.  
 Phillips, Chas. T.....Machinist.  
 Van Vleck, A.....Mfr. Edge Tools.

**KATONAH.**

Bryant, Lloyd.....Iron Founder.

**KEENE VALLEY.**

Weston, W. T. & I. H.....Iron, &c.

**KEESEVILLE.**

An Sable Horse Nail Co.  
 Kingsland, Nelson.....Founder & Machinist.  
 Wills, John D.....Machinist.

**KENNEDY.**

Nichols, Benj.....Millwright.

**KINDERHOOK.**

mer, Chas.....Iron, &c.

**KING'S FERRY.**

King, Marcus D.....Machinist.

**KINGSTON.**

Coutant, E. B.....Iron Works.  
 Halloran, J. F.....Plumber.  
 Hermance Bros.....Founders & Machinists.  
 Loughran, Bernard.....Plumbers.  
 McEntee & Dillon.....Boiler Makers.  
 Millard, James.....Machinist.  
 Nextel, Frank W.....Plumber & Gas Fitter.  
 New York Standard Scale Co  
 Onslow Scale & Mfg. Co.....Mfrs. Agl. Impts. and  
 Scales.  
 Shultus & Co.....Iron Works.

**KNAPP'S CREEK.**

Cronan, C.....Boiler Maker.  
 Josssett, Bros.....Machinists.

**KNIGHT'S CREEK.**

Fox, Frank.....Machinist.  
 Hunt, William.....Machinist.

**LACONIA.**

Hamer, T. L.....Iron Founder.

**LA FAYETTE.**

Cole, Henry.....Mfr. Agl. Impts.  
 Robinson, H.....Mfr. Agl. Impts.

**LA GRANGE.**

Miller, S. A.....Machinist.

**LAKE SIDE.**

Wiley, James.....Mfr. Plows.

**LANCASTER.**

Mante, Frank.....Iron Founder.

**LANSINGBURG.**

Arnold & Rowe.....Founders & Mfrs. Scales.  
 Graham, Thomas.....Gas Fitter.

**LAURENS.**

Allen, A. A.....Iron, &c.

**LEE CENTRE.**

Daverny, A. W.....Machinist.  
 Potter, O. M.....Machinist.

**LEEDS.**

Fowks, M.....Mfr. Plows.  
 Palmatier Spring Co.....Mfrs. Springs.

**LEONARDSVILLE.**

Babcock, H. D.....Founder & Machinist.  
 Green, E. A.....Mfr Agl. Impl'ts.

**LE ROY.**

Stewart, V. R.....Iron Founder.  
 Warren, J. F.....Iron Founder.  
 Warren Mfg. Co.....Mfrs. Agl. Impl'ts.

**LEWIS.**

Keith, Alford, & Son.....Iron Founders.  
 Stower & Esmond.....Mfrs. Iron.

**LIMA.**

Farnsworth & Gillett.....Iron Founders.  
 Gillett, Watson & Co.....Machinists.

**LINDEN.**

Flummer Bros.....Iron Founders.

**LISLE.**

Bassett, Geo., & Son.....Iron Founders.

**LITTLE FALLS.**

Cheney, Henry.....Mfr. Hammers.  
 McDermott & A-henhurst.....Iron Founders.  
 Demarest, G. H.....Plumber.  
 Reddy, Michael.....Iron Founder.  
 Tra-k. G. W.....Mfr. Axes.  
 Warrior Mower Co.....Mfrs. Mowing Machines.  
 Williams, M. M.....Gas Fitter.

**LIVONIA.**

Hoppaugh, W. D. F.....Millwright.

**LOOKPORT.**

**IRON FOUNDERS.**

Baily, T. R. Hildreth, G. W., & Co.  
 Bramley Bros. & Co. Hilton & Drew.  
 Drew, John Holly Mfg. Co.  
 Gardner, Leonard & Son. Pound Mfg. Co.  
 Harris, W. West, Elisha.

**MACHINISTS.**

American Granulating Merritt, Isaac E.  
 Mill Machinery Co. Pound Mfg. Co.  
 Button, R. H. Richmond Mfg. Co.  
 Ellis, Henry A. Tildsley, Jos.  
 Hall, G. W. Trevor & Co.  
 Johnston, Arthur. West, Elisha.

**LOCKPORT—Continued.****MISCELLANEOUS.**

Ag'r, Wm..... Mfr. Files.  
 Arrowsmith, Geo..... Mfr. Turbine Wheels.  
 Cocker, Wm..... Mfr. Saws.  
 Drake & Fry..... Plumbers.  
 Fessenden, James H..... Mfr. Car Couplings.  
 Haney & Saran..... Plumbers.  
 Holly, Carlos..... Mfr. Steam Pipe.  
 Jakeway, Edwile..... Millwright.  
 McCue & Fairfield..... Plumbers.  
 McRae, Daniel W..... Boiler Maker.  
 Markey, Owen S..... Mfr. Bolts.  
 Mills, R. E..... Mfr. Agrl. Impl'ts.  
 Moss, John L..... Brass Founder.  
 Palmer, W. W..... Machinery.  
 Phillips, A. M..... Mfr. Agrl. Impl'ts.  
 Rakes, Chas..... Mill Machinery.  
 Union Mfg. Co..... Mfrs. Agrl. Impl'ts.  
 Westerman, Bruce & Co..... Rolling Mill.

**LONG ISLAND CITY.**

Brodie, Wm..... Plumber.  
 Hagan & Daly..... Boiler Makers.  
 Howell, E. W..... Machinist.  
 Lewis, C. H..... Plumber.  
 McGee, Joseph..... Iron Founder.  
 Murphy, Samuel..... Iron Worker.  
 Sullivan, D. J..... Plumber.  
 Thompson, C. A..... Long Island R. R.  
 Trevor & Co..... Mfrs. Saw Machinery.

**LORRAINE.**

Harrington, H..... Mfr. Edge Tools.

**LOWVILLE.**

Boshart, W. L. & Co..... Plumbers.  
 Eldred, Albert..... Machinist.  
 Fowler, Geo. W. & Sons..... Plumbers.  
 Pfister & Powell..... Iron Founders.

**LUDLOWVILLE.**

Emery, John..... Iron Founder.

**LYNDONVILLE.**

Gray, Wm..... Iron Founder.

**LYONS.**

Auld, Henry..... Mfr. Agrl. Impl'ts.  
 Claxson, Schlee & Bro..... Iron Founders.  
 Ehrhardt, Geo. & Sons..... Mfrs. Agrl. Impl'ts.  
 Hale, A. S..... Machinery, &c.  
 Lyons Agricultural Works.  
 Putney, H. W..... Mfr. Agrl. Impl'ts.  
 Van Wickle, S. D..... Mfr. Agrl. Impl'ts.

**LYSANDER.**

Spratt, John..... Mfr. Agrl. Impl'ts.  
 Spratt, Mrs. M..... Iron Founder.

**MCLEAN.**

Cole, E..... Millwright.  
 Griggs, W. H..... Founder & Machinist.  
 Watson Bros..... Machinists.

**MACEDON.**

Bickford & Huffman..... Mfrs. Agrl. Impl'ts.

**MAINE.**

Heath, Morgan & Co..... Mfrs. Agrl. Impl'ts.

**MALDEN.**

Everett, W. M..... Shipsmith.

**MALLORYVILLE.**

Watson & Bro..... Machinists.

**MALONE.**

Beach, M. L..... Machinist.  
 Gray, W. H..... Ogdensburg & Lake Champlain R. R.  
 Hale, O. B..... Machinist.  
 Hinds & McDonough..... Iron Founders.  
 Klols, Thomas..... Machinist.  
 Line, E..... Machinist.  
 Malone Foundry Co.  
 Mansfield, H. N. J..... Millwright.  
 Whittlesey & Weed..... Iron Founders.

**MAMARONECK.**

McLaughlin, J. H..... Plumber and Gas Fitter.  
 Port Chester Bolt & Nut Co.

**MANCHESTER CENTRE.**

Vanarsdale, J. W..... Millwright.

**MANHASSET.**

Frick, F. L..... Plumber.

**MANLIUS.**

Cheney S. & Son..... Iron Founders.  
 Scoville, E. U..... Iron Founder.  
 Wood, E. W. H..... Mfr. Edge Tools.  
 Wood Mfg. Co..... Machinists.

**MANLIUS STATION.**

Snyder, Adam..... Sheet Iron Worker.

**MAPLE GROVE.**

Barker, W. H..... Mfr. Agrl. Impl'ts.

**MARGARETTEVILLE.**

Chase & Gilberts..... Iron Founders.

**MARION.**

Smith, Louis..... Iron Founder.

**MARTINSBURG.**

Jones, S. K. & Son..... Millwrights.

**MASSENA.**

Balch, Frederick..... Plumber.

**MATTEAWAN.**

Colwell, W. S..... Machinist.  
 Colwell, Mrs. Edward..... Machinist.  
 Rothery, John & William..... Mfrs. Filer.  
 Schenck, H. B..... Machinist.

**MAYFIELD.**

Anthony, O. A..... Mfr. Edge Tools.

**MAYVILLE.**

Bixby, H. S..... Machinist.  
 Howell, W. T..... Machinist.

**MECHANICSVILLE.**

Leuffer, E. M, Boston, Hoosac Tunnel & Western Railroad.  
 Ryan, Thomas..... Machinist.

**MEDINA.**

Bignall Mfg. Co..... Iron Founders.  
 Bowen, Robinson & Beach..... Iron Founders.  
 Empire Mfg Co..... Iron Founders.  
 Ide & Sons..... Iron Founders.  
 Johnson, O. K..... Machinist.  
 Lasher & Olcutt..... Machinists.  
 M-dina Mfg Co..... Iron Founders.  
 Mount & Robertson..... Iron Founders.  
 Robertson & Stratton..... Mfrs. Agrl. Impl'ts.  
 Wetmore & McGee..... Mfrs. Springs.

**MELLENVILLE.**

Smith, Webster..... Machinist.

**MERIDIAN.**

Wilson, D. M. & Co..... Iron Founders.

**MEXICO.**

Clark & Rice..... Iron Founders.  
 Earl, F. M..... Machinist.

**MIDDLEBURG.**

Schoonmakers, W. R..... Mfr. Agrl. Impl'ts.  
 Tompkins & Watson..... Iron Founders.

**MIDDLEPORT.**

Van Brocklin, Daniel & Son..... Iron Founders.

**MIDDLETOWN.**

Clemson Bros..... Mfrs. Saws.  
 Coleman & Cummings..... Founders & Machinists.  
 Fanford, J. M..... Mfrs. Agrl. Impl'ts.  
 Madden & Cockaye File Co..... Mfrs. Files.  
 Maher, J. F..... Plumber.  
 Mulock, Daniel..... Machinist.  
 Oates, J..... Mfr. Cutlery.  
 Vail, A. L..... Iron Founder.

**MIDDLETOWN—Continued.**

Van Duzer, I. F. & Co.....Plumbers.  
Wheeler, Madden, & Clemson Mfg. Co.....Mfrs.  
Steel & Saws.

**MILLBROOK.**

Lane Bros.....Founders & Machinists.  
Lane, Field & Co.....Mfrs. Agl. Impls.

**MILLER'S FALLS.**

Young, D. G.....Mfr. Cutlery.

**MILLERTON.**

Millerton Iron Co.....Mfrs. Iron.  
Scutt, John.....Mfr. Plows.

**MILLPORT.**

Little Giant Mfg. Co.....Iron Founders.

**MILTON.**

Ball, John.....Iron Founder.

**MINERVILLE.**

Burleigh, H. G. & Bro.....Iron.

**MOHAWK.**

Johnson, James.....Iron Founder.  
Johnson, C. & Son.....Iron Founders.  
Myers, Abram.....Plumber and Gas Fitter.

**MOIRA.**

Hyde, W. E.....Machinist.

**MONTICELLO.**

Evans, John L.....Mfr. Agl. Impl'ts.  
Fairchild, Eli.....Iron Founder.  
Symeson, John F.....Mfr. Agl. Impl'ts.

**MORAVIA.**

Galpin, Geo. W.....Machinist.  
McCreddie & Carmichael.....Mfrs. Agl. Impl'ts.  
Moravia Foundry & Machine Co.....  
Nolan, Michael.....Machinist.  
Walker, W. V.....Mfr. Agl. Impl'ts.

**MORRISONVILLE.**

Taylor, J. M.....Iron Founder.

**MORRISVILLE.**

Cross, G. & D.....Iron Founders.  
Graham, Dwight.....Engine Builder.

**MOSHERVILLE.**

Cornell, W.....Iron Founder.

**MOTT'S CORNERS.**

Ault, J.....Machinist.  
Lull, J. B.....Mfr. Gun Barrels.

**MOTTVILLE.**

Delano, D. H.....Machinist.  
Hoyt, E. B.....Founder & Machinist.

**MOUNT MORRIS.**

Allen & Sleeper.....Machinists.  
Genesee Valley Mfg. Co.....Mfrs. Agl. Impl'ts.

**MOUNT VERNON.**

Burnett, Richard.....Plumber.  
Downing, Henry M.....Plumber.  
Howard, Geo.....Plumber.  
Laplace, J.....Plumber.

**MUMFORD.**

Blair, James.....Machinist.  
McNaughton, D. B. & C. M.....Iron Founders.

**MUNSVILLE.**

Stringer, Barr & Co.....Mfrs. Agl. Impl'ts.

**NAPANOCH.**

Du Vall, Isaac A.....Mfr. Agl. Impl'ts.  
Pillsbury, M. M.....Mfr. Edge Tools.  
Russell, Jno. B.....Mfr. Edge Tools.

**NAPLES.**

Riddont, P.....Machinist.  
Wells, E. & Son.....Mfrs. Agl. Impls.

**NASSAU.**

Van Allen, James.....Iron Founder.

**NAVARINO.**

Walters, P. & Son.....Iron Founders.

**NEWARK.**

Bartle, W. S.....Machinist.  
Snyder, Philip.....Mfr. Agl. Impls.  
Wilbur, J. C.....Iron Founder.

**NEWARK VALLEY.**

Hunt, Lewis.....Mfr. Agl. Impls.

**NEW BERLIN.**

Haight, Henry L.....Iron Founder.  
Matteson, Geo. J.....Machinist.

**NEW BRIGHTON.**

Alexander, Chas. W.....Plumber.  
Gaynor, Mark.....Plumber.  
Howarth, Thomas.....Plumber.  
Lockwood, C. A.....Plumber.  
Santry, J. J.....Plumber.

**NEWBURGH.**

Chadburn & Coldwell Mfg. Co., Mfrs. Lawn Mowers.  
Cronk, Chas. W.....Plumber.  
Delaney, Patrick.....Boiler Maker.  
Flanagan, John.....Plumber.  
Hampson, Jos.....Machinist.  
Haney, P. D.....Boiler Maker.  
Hawks, W. K.....Gas Fitter.  
Irwin, Jacob L.....Coppersmith.  
Kelley, D. S.....Plumber.  
Kimball, S. G. & Sons.....Iron Founders.  
McArdle & Hart.....Iron, etc.  
McCann, Henry.....Plumber.  
Nixon, Wm.....Gas Fitter.  
Spier, Thos. R.....Iron Founder.  
Stranding, Edwin.....Machinery.  
Van Cleft, Jos.....Mfr. Agl. Impls.  
Ward, Stanton & Co.....Machinery.  
Whitehill, Robert.....Iron Founder.  
Wright, Wm.....Engine Builder.

**NEWCASTLE.**

Wilts, G. & W.....Machinists.

**NEWFIELD.**

Spaulding, P. E.....Millwright.

**NEW HAMBURGH.**

Disbrow & Brown.....Iron Founders.

**NEW ROCHELLE.**

Becker & Sons.....Mfrs. Scales.  
Burnett, R.....Plumber.  
Ross, Geo.....Gas Fitter.

**NEW RUSSIA.**

Putnam, H. A.....Iron, etc.

**NEW UTRECHT.**

Fiegle M. & Son.....Car Builders.

**NEW YORK CITY.****BOILER MAKERS.**

Abendroth & Root Mfg Co.....28 Cliff.  
Ahern, Dennis.....279 Cherry.  
Aller, A.....109 Liberty.  
Allison, Joseph J.....46 Jefferson.  
Babeock & Wilcox Co.....30 Cortlandt.  
Booth, Samuel.....545 W. 35th.  
Carnie, John A.....223 West.  
Cobanks & Theall.....65 Bethune.  
Collins, Wm.....ft Bogart.  
Duplex Saf-ty Boiler Co.....34 Cortlandt.  
Erie City Iron Works.....45 Cortlandt.  
Fletcher, W. & A.....266 West.  
Fox, G. & Son.....511 W. 34th.  
Gibson, Geo. W.....138 Goerck.  
Gold's Heater Mfg Co.....624 to 642 E. 14th.  
Goshen Safety Boiler Co.....39 Dey.  
Hampson, E. P. & Co.....36 Cortlandt.  
Hansen & Robbins.....126 Washington.  
Heathen, Henry.....607 W. 38th.  
Heipershausen Bros.....45 Tompkins.  
Hit-hings & Co.....233 Mercer.  
Hughes, John.....106 E. 131st.

## NEW YORK CITY—Continued.

Lucas, R.,	597 Washington.
Lyons, H. B.,	45 Cortlandt.
McBain, Thos. A.,	540 W. 46th.
McCurdy & Warden,	276 West.
Muldoon & Killierlane,	240 West.
Nichols, D. M.,	2 Gouverneur St.
Peck, Howard & Co.,	72 West.
Pierrez, Murphy & Larkin,	357 West.
Slater & Reid,	409 West.
Walther & Smith,	481 11th av.
Weston Boiler Co.,	69 Liberty.

## BRASS FOUNDERS.

Allt, Edmund,	2 Hague.
Brumman, Adolph,	155 Perry.
Clark, Minf-rd S.,	14 Wooster.
Claudet, Frank,	117 Macdougai.
Cory, Chas. & Son,	278 Division.
Donegan & Reilly,	229 West.
Donohue, James,	11 Laight.
Dorset, Isaac R.,	149 N. 9th.
Eaton, Cole & Burnham Co.,	58 John.
Francis, Thomas,	67 Vestry.
Gallagher, James,	87 Centre.
Gregory, James,	106 Cannon.
Gregory, William,	106 Cannon.
Grothe, George,	101 Wooster.
Haggarty, Geo. A.,	803 3rd av.
Henison, Chas. W.,	169 Christopher.
Henry & Bonnard,	237 Mercer.
Honrigan, Patrick,	11½ James St.
Ill, John,	201 Wooster.
Johnson Hy F.,	1 Desbrosses.
Kieb, George,	101 S. 5th av.
Landers, Edmund,	12 Jacob.
McCann, Peter,	154 South.
McKenna, James J. & Bro.,	424 E. 23rd.
McMann, J. R.,	56 Go d.
McNab & Harlin M'fg Co.,	56 John.
Mahoney, J. & P.,	213 Grand.
Marshall, Robert,	7 Allen.
Martin, B. M.,	142 Greene.
Miller, Thomas,	34 W. 3rd.
Nason Mfg. Co.,	71 Fulton.
Power, Maurice J.,	5 Beekman.
Powers, John,	438 E. 10th.
Ruehe, A.,	312 E. 75th.
Sands & Baxter,	6 Reade.
Scanlon, Michael,	120 Elizabeth.
Schilling, Peter,	43 Eldridge.
Schoot, Emanuel,	80 Elm.
Soffe, Henry,	179 Grand.
Sedman, J. M.,	E. 136th nr 3rd av.
Stevenson, Henry,	97 Elizabeth.
Sweeney, Edward,	4 Duane.
Sweeney, J. & Barrett,	3 Dutch.
Thom, Chas. A.,	123 W. 28th.
Wilson, David,	545 W. 33d.

## BRASS GOODS MFES.

American Clock & Brass Co.,	8 Warren.
Ansonia Brass & Copper Co.,	19 & 21 Cliff.
Bailey, W. H.,	78 John.
Baker Brass Co.,	13 Laight.
Benedict & Burnham M'fg Co.,	11 Murray.
Benton, Faulkner & Bird,	16 New Church.
Bergen, Louis,	414 E. 26th.
Boheren, U. & Co.,	259 W. 27th.
Bolz & Haas,	168 Centre.
Bowcock, B.,	193 Mercer.
Brass Goods M'fg Co.,	85 Chambers.
Bridgeport Brass Co.,	19 Murray.
Bristol Brass & Clock Co.,	32 Warren.
Brooklyn Brass & Copper Co.,	100 John.
Brown, Geo. W.,	32 Warren.
Brown & Bros.,	82 Chambers.
Cerf, F.,	208 E. 23d.
Check Register M'fg Co.,	49 Astor ho.
Cook, Thos. W. G.,	154 Grand.
Davol, John & Sons,	100 John.
Eaton, Cole & Burnham Co.,	58 John.
Ehrlich, Emil,	172 Suffolk.
Elliott, Wm.,	53 Fulton.
Farrell, James H.,	61 Astor ho.
Fiedler, A.,	171 Canal.
Franklin, E. M.,	85 Chambers.
Gillis, John P. & Co.,	82 John.

## NEW YORK CITY—Continued.

Gothenberg, H. & Son,	Franklin cor. Centre.
Guerin, P. E.,	210 Greene.
Gunther, G.,	105 William.
Hasall, Wm.,	63 Elizabeth.
Hayden Co.,	142 Beekman.
Heringer, Chas. & J. Wagnell,	142 Wooster.
Hickman Hose Coupling Co.,	194 Elm.
Hilton, Edward C.,	112 John.
Holmes, Booth & Haydens,	49 Chambers.
Holmes & Griggs M'fg Co.,	63 Duane.
Homes & Wessell Metal Co.,	525 W. 24th.
Huthwohl, L. & Co.,	121 Prince.
Huttlng, George,	151 Bleeker.
Janusch, F. G.,	306 E. 19th.
Ka-schaw, J., Brother & Co.,	138 Centre.
Klemann, Peter,	172 Centre.
Knapp M'fg Co.,	24 Frankfurt.
Lang, W.,	33 John.
Manhattan Brass Co.,	475 1st Av.
Marvin, E. R. & Co.,	88 Fulton.
Menahan, John,	Franklin nr Centre.
Merchant & Co.,	Cliff cr. Beekman.
Mersereau, W. T. & J.,	321 Broadway.
Miller, E. & Co.,	35 Warren.
Moffet, James G.,	119 Prince.
Morrison, David,	55 W. 16th.
Morse, Jas. O.,	76 John.
Mullaney, James,	204 E. 23rd.
Nathan & Dreyfus,	92 Liberty.
Nelson & Finkel,	439 E. 10th.
Novelty M'fg Co.,	98 Chambers.
Petsch, Conrad,	140 Centre.
Phelps, Dodge & Co.,	11 Cliff.
Plume & Atwood M'fg Co.,	18 Murray.
Prahar, L. & Bro.,	3 Mission Pl.
Rascoll, Jules E.,	220 Wooster.
R-inhardt, J. F.,	209 Centre.
Rich, E. S.,	114 John.
Roche, David,	47 Barclay.
Schimper, Wm.,	138 Wooster.
Schrader, Augustus,	216 William.
Schwenkel, Louis F.,	2 Duane.
Seoville M'fg Co.,	419 Broome.
Sherman, John,	296 Broadway.
Smith, May E.,	15 Dutch.
Stone, F. & Co.,	62 Gold.
Strickrodt, C. & Co.,	136 Centre.
Suhr, Emil,	140 Centre.
Taylor, Geo.,	60 Duane.
Tiebout, W. & J.,	33 Chambers.
Van Winkle, F.,	36 Sheriff.
Voight & Hahn,	321 E. 22nd.
Wallace & Sons,	89 Chambers.
Waterbury Brass Co.,	296 Broadway.
Whately, Geo. B.,	139 Lewis.
Worthington, Thos. M.,	247 Spring.
Zinn & Messer,	83 Centre.

## COPPERSMITHS.

Avery, Thomas C.,	231 South.
Baerenklau, Gustav A.,	172 Forsyth.
Buhler Frederick,	92 Eldridge.
Burkhard, P. S.,	180 Grand.
Burkhard, Thomas,	125 White.
Burkhard, Etta,	46 Allen.
Carpenter, Allan,	103 N. Moore.
Davies, Thos.,	215 E. 64th.
Donegan & Reilly,	229 West.
Frank, Marks,	40 Ludlow.
Graves & Hoffmire,	14 James St.
Haas & Hilgenre,	180 Centre.
Heinemann, Godfrey,	112 John.
Jochum & Jetter,	148 E. 50th.
Kaplan, Harris,	11 Essex.
Knowles, Fred C.,	35 Desbrosses.
Martin, Louis,	56 W. Houston.
Mills, Abner B.,	127 Av. D.
Moncuse, E.,	128 S. 6th Av.
Morton, Thos. S.,	65 Elizabeth.
Neumann, John,	118 Elizabeth.
Petterson, John,	102 Market.
Pfenning, Henry R.,	136½ Liberty.
Reisert & Ort,	181 Prince.
Roos, August,	238 W. 27th.
Rosenthal, Harris,	47 Orchard.
Sagnol, E.,	44 W. 4th.
Shaw, Jas. & Co.,	173 Christopher.

## NEW YORK CITY—Continued.

Spitzer, Leopold.....	66 Centre.
Steeger, Henry & Co.....	143 E. 31st.
Street, Wm.....	92 Fulton.
Stump, Geo. W.....	460 Greenwich.
Trageer, John.....	447 to 455 W. 26th.
Vetterling, William.....	270 Centre.

## CUTLERY MANUFACTURERS.

Braun, Conrad.....	65 Suffolk.
Buettner, Bernhard.....	509 E. 11th.
Chalmers & Murray.....	76 Reade.
Curley, J. & Bro.....	134 Nassau.
Deplanque, Emil.....	74 Reade.
Eickhoff, August.....	381 Broome.
Ely & Wray.....	74 Reade.
Forschner, Chas.....	39 & 41 Rivington.
Friedmann & Lauterjung.....	73 Reade.
Gildersleeve, J. M.....	49 Chambers.
Godechild, R. A.....	39 Worth.
Graef, Albrecht.....	102 Duane.
Greib, Matthew.....	103 Essex.
Guthinger, George I.....	117 Prince.
Haag, F. & G.....	101 Elm.
Hahn, Philip.....	152 Centre.
Harrison Bros. & Honson.....	126 Chambers.
Holler, John S. & Co.....	94 Duane.
Knauth, Gustav.....	71 Nassau.
Landers, Frary & Clark.....	290 Broadway.
Leudner, Paul.....	582 Hudson.
Lindemann, O. & Co.....	254 Pearl.
Meriden Cutlery Co.....	49 Chambers.
Nixon, Geo. W. C.....	173 William.
Peters Brothers.....	58 Reade.
Ritzmann, Charles L.....	943 Br. adway.
Rodgers, Joseph & Sons.....	82 Chambers.
Russell, John, Cutlery Co.....	25 Chambers.
Saunders, Geo. F.....	3 Astor ho.
Schaefer, August.....	202 E. 29th.
Smith, Theodore.....	6 Park Place.
Sellers, William B.....	95 John.
Seymour, Henry, Cutlery Co.....	84 Chambers.
Vomdorp, August.....	94 Duane.
Weed, Theodore.....	122 Chambers.
Williams, Bros., M'fg Co.....	89 Chambers.
Witte & Delclieur.....	96 Duane.

## GAS FIXTURE MANUFACTURERS.

Arnold, A. S. & Co.....	1293 Broadway.
Archer & Pancoast M'fg. Co.,.....	70 Wooster.
Barker, Joseph S.....	168 Centre.
Bradley & Hubbard M'fg. Co.....	51 Barclay.
Cassidy & Son.....	120 Mercer.
Covell, C. H.....	115 Broadway.
Cunningham, James.....	161 W. 29th.
Curtis, M. L. & Co.....	1325 Broadway.
Depaloe, J. S.....	680 Broadway.
Donaldson, Joseph.....	74 E. 9th.
Freaney, W. H.....	142 Green.
Gleason, E. P. M'fg. Co.,.....	20 W. Houston.
Hicks & Smith.....	42 S. 5th ave.
Houchin M'fg. Co.....	43 Chambers.
Iden & Co.....	194 Hester.
Kitchen, Geo. H. & Co.....	23 University Place.
Lacey, Geo. S. & Co.....	1293 Broadway.
McLewee, F.....	7 West 4th.
Mitchell, Vance & Co.....	836 Broadway.
Naehar, Chas.....	206 Canal.
Oxley & Giddings.....	113 Walker.
Palmer's, James F. Son.....	47 University Place.
Patterson Co. The.....	17 W. Houston.
Royle, Chas.....	Franklin near Elm.
Ryan, May & Latus.....	38 Bleecker.
Schneider, Campbell & Co.....	7 Union Square.
Sellers, W. B.....	95 John.
Sleeman, N.....	70 University Pl.
Standard M'fg. Co.....	9 Bond.
Travis & Ferry.....	140 Greene.
Titsink & Phillips.....	207 Centre.
Williams, John.....	115 E. 13th.
Young, W. C.....	170 Centre.

## HARDWARE MANUFACTURERS.

Backus, Quimby S.....	102 Chambers.
Baxter Wrenth Co.....	118 Chambers.
Boker, Herman & Co.....	101 Duane.
Bramhall, W. H.....	128 Chambers.

## NEW YORK CITY—Continued.

Burkinshaw, W. C.....	78 Chambers.
Butler & Goldie M'fg. Co.....	97 Chambers.
Charlton, John.....	110 Chambers.
Cheriton, Theodore F.....	97 Chambers.
Cheritree Hardware Co.....	97 Chambers.
Collins & Co.....	212 Water.
Dunlap, Chas. W.....	85 Chambers.
Durrie & McCarty.....	97 Chambers.
Farr, Asa.....	64 College Place.
Farrington, J. L. & Co.....	37 Warren.
Fuller Bros.....	97 Chambers.
Greene, Tweed & Co.....	118 Chambers.
Halsted, Griffin B.....	55 Cliff.
Henderson & Morris.....	65 Duane.
Hopkins & Dickinson M'fg. Co.....	83 Reade.
Hotchkiss, Guy, C. Field & Co.....	624 E. 14th.
Hundley & Hanks.....	79 Reade.
Hymes, David.....	112 Chambers.
Lamson, Allen G.....	88 Chambers.
Lamson & Goodnow M'fg. Co.....	88 Chambers.
Landers, Frary & Clark.....	298 Broadway.
Langlein, Charles.....	131 Worth.
McBain, Thos. A.....	540 W. 46th.
Maltly, Curtis & Co.....	98 Chambers.
Many, Francis.....	143 Chambers.
Market & Co.....	141 Centre.
Millers Falls Co.....	74 Chambers.
Moore Bros.....	96 Chambers.
Newman, Allen.....	157 W. 29th.
Parker, Chas. Co.....	97 Chambers.
Parr, John.....	647 8th ave.
Peck, Stow & Wilcox Co.....	43 Chambers.
Pratt, H. L.....	74 Chambers.
Pryor, R. W. & Co.....	32 Vesey.
Reading Hardware Co.....	81 Reade.
Russell & Erwin M'fg Co.....	45 Chambers.
Sargent & Co.....	37 Chambers.
Sutton, Wm. A.....	524 W. 20th.
Swan & Brombacher.....	33 Fulton.
Tiebout, W. & J.....	33 Chambers.
Tower, John J.....	96 Chambers.
Vanwagoner & Williams.....	82 Beekman.
Vomeleff & Co.....	14 Thomas.
Weeks, A. A.....	82 John.
Wiebusch & Hilger Hardware Co.....	84 Chambers.

## IRON FOUNDERS.

Aetna Iron Works.....	411 Eighth.
Anderson, B. C. & Co.....	87 Pike.
Althouse, S. B. & Co.....	144 Greene.
Andrews & Cloney.....	545 W. 33rd.
Ayres, Abraham.....	625 Tenth.
Ayres, Zephaniah S.....	506 W. 45th.
Bartlett, Hayward & Co.....	275 Pearl.
Benedict, Julius.....	548 W. 56th.
Bent, Samuel S. & Son.....	72 Beekman.
Blake, McMahon & Co.....	515 W. 25th.
Blakslee, E. G. & Co.....	80 Centre.
Brady, Alfred.....	43 Greene.
Buhler, Henry.....	50 Park.
Burnett & Co.....	706 E. 12th.
Cameron, Jno. A.....	182 6th ave.
Campbell, Andrew J.....	554 W. 33rd.
Cheney & Hewlett.....	201 Broadway.
Colwell, Lewis.....	549 W. 27th.
Composite Iron Works Co.....	53 Chambers.
Conover, L. V. & Co.....	336 E. 29th.
Cook & Radley.....	214 E. 37th.
Cornell, J. B. & J. M.....	141 Centre.
Coxsackie Malleable & Grey Iron Co.....	69 Varick.
Cummings, Joseph.....	45 Duane.
Deeley, R. & Co.....	Ft. W. 32nd.
Delamater, C. H. & Co.....	Ft. W. 13th.
Demarest, C. B. & Co.....	216 Mott.
Dimond, J. G. & T.....	209 & 211 W. 33rd.
Dorsett, Isaac R.....	149 N. Ninth.
Dougherty, H. B. & W. H.....	145 Bank.
Duryee, George.....	176 Broadway.
Erie City Iron Works.....	45 Cortlandt.
Fisk, J. W.....	26 Park Place.
Floyd, James R.....	742 Greenwich.
Fox, Benjamin.....	517 W. 34th.
Goshen Foundry & Gas Machinery Co.....	39 Dey.
Heuvelman & Co.....	842 Broadway.
Hitchings & Co.....	555 W. 33rd.
Hotchkiss, Guy C. Field & Co.....	624 E. 14th.
Jackson, James L.....	329 E. 28th.

## NEW YORK CITY—Continued.

James & Kirtland,.....	19 E. 17th.
Johnson, Isaac G. & Co.,.....	Spuytun Duyvil.
Johnson, Julius & Co.,.....	Ft. E. 118th.
Lindsay, Graff & Megquier,.....	62 E. 14th.
McKinley & Smack,.....	502 Water.
McMonnies, Wm.,.....	196 Broadway.
McNab & Harlin Mfg Co.,.....	56 John.
Mallon & Rourke,.....	162 Jane.
Manhattan Iron Works Co.,.....	Ft. W. 143rd.
Marshall, R.,.....	7 Allen.
Mietz, August,.....	89 Elizabeth.
Morris & Cummings Dredging Co.,.....	45 Duane.
Mott, J. L. Iron Works,.....	N. 3rd Av., cor. E. 133rd.
Nichols, S. & Bro.,.....	197 Wooster.
Nichols, W. D. & A. S.,.....	73 Hudson.
Palmer, N. F. Jr. & Co.,.....	741 E. 11th.
Patten, Jefferson Jr. & Co.,.....	114 John.
Paulding, Kemble & Co.,.....	30 Broadway.
Roach, John & Son,.....	814 E. 9th.
Robins & Lee,.....	149 N. 10th Av.
Sanders, F. R.,.....	424 E. 19th.
Savery, John Son & Co.,.....	26 Cliff.
Shriver, Thos. & Co.,.....	333 E. 56th.
Staubach, Baldwin,.....	650 E. 12th.
Toop, Geo. H.,.....	E. 88th, nr. Lex Av.
Vance Iron Foundry Co.,.....	123 Chambers.
Ward, Stanton & Co.,.....	52 John.
Warren Foundry & Machine Co.,.....	160 Broadway.
Welch & Barnum,.....	Spuytun Duyvil.
Wells, W. H. & Co.,.....	110 Cannon.
West Point Foundry,.....	30 Broadway.
Worrall & Co.,.....	28 Elm.
Zipfel, Joseph,.....	196 Third.

## IRON.

Albany & Rensselaer Iron & Steel Co.,	56 Broadway.
American Swedes Iron Co.,.....	44 Murray.
Birmingham Coal & Iron Co.,.....	132 Broadway.
Bridgewater Iron Co.,.....	73 Pearl.
Butler, Cyrus,.....	24 Cliff.
Carmichael & Emmons,.....	130 Cedar.
Cooper, Hewitt & Co.,.....	17 Burling Slip.
Cumberland Coal & Iron Co.,.....	52 Broadway.
Diamond State Iron Co.,.....	21 Cortlandt.
Duclos, Joseph M.,.....	229 Broadway.
Eames Petroleum Iron Co.,.....	21 Nassau.
Himrod Furnace Co.,.....	20 Nassau.
Hubbard, Chas.,.....	46 Cliff.
Jarboe, J. W. & Son,.....	519 E. 19th.
Kentucky River Iron Mfg Co.,.....	52 William.
Leonard, John,.....	451 West.
Manganese Iron Ore Co.,.....	115 Broadway.
Milliken & Smith,.....	95 Liberty.
Moselley Iron Bridge & Roof Co.,.....	5 Dey.
Naylor & Co.,.....	99 John.
New Jersey Iron & Steel Co.,.....	17 Burling Slip.
New York & Ohio Iron & Steel Co.,.....	34 Liberty.
Noyes & Wines,.....	44 Centre.
Pa-saic Rolling Mill Co.,.....	45 Astor Ho.
Paterson Iron Co.,.....	45 Astor Ho.
Peru Steel & Iron Co.,.....	115 Broadway.
Phoenix Iron Co.,.....	95 Liberty.
Reading Iron Works,.....	28 Pearl.
Reiley Bros.,.....	418 W. 42nd.
Simmons, John,.....	106 Centre.
Sligo Iron Works,.....	22 Platt.
Sterling Iron & Railway Co.,.....	42 Pine.
Taylor Iron Works,.....	91 Liberty.
Thorne, Charles T.,.....	35 Pine.
Trenton Iron Co.,.....	17 Burling Slip.
Tuckerman, Mulligan & Co.,.....	90 Broadway.
Turl, John,.....	534 W. 28th.
Weed & Mecum,.....	82 John.
Welch & Barnum,.....	Spuytun Duyvil.
Westervelt, A. B. & W. T.,.....	102 Chambers.
Whitney, A. R. & Co.,.....	58 Hudson.

## IRON PIPE.

Allison, W. C.,.....	78 John.
American Tube & Iron Co.,.....	98 John.
Asphalted Wrought Iron Pipe Co.,.....	550 E. 117th.
Barr, Edward,.....	78 John.
Benton, Faulkner & Bird,.....	35 Dey.
Blaklee, E. G. & Co.,.....	80 Centre.
Bonner & Vancourt,.....	242 Canal.
Brady, Alfred,.....	43 Greene.

## NEW YORK CITY—Continued.

Brick, Riley A.,.....	85 Liberty.
Campbell, Felix,.....	79 John.
Campbell, William W.,.....	85 Liberty.
Eaton, C. de & Burnham Co.,.....	58 John.
Hunter, Keller & Co.,.....	142 Centre.
Janer, Jacobs & Co.,.....	64 John.
Loughry, William P.,.....	16 Cliff.
McMann, T. R. & Bro.,.....	56 Gold.
McNab & Harlin Mfg Co.,.....	56 John.
Marcellus, C. N. & Co.,.....	69 Varick.
Morris, Tasker & Co.,.....	15 Gold.
Morse, James O.,.....	76 John.
Mott, J. L., Iron Works,.....	88 Beekman.
Nason Mfg Co.,.....	71 Beekman.
National Tube Works Co.,.....	104 John.
Nelson, William Jr.,.....	ft. E. 53rd.
Pancoat & Rogers,.....	28 Platt.
Patent Water & Gas Pipe Co.,.....	41 Dey.
Runkle, Wm.,.....	162 Broadway.
Simmons, John,.....	108 Centre.
Stephens & Kellan,.....	93 William.
Trask & Carmichael,.....	126 Leonard.
Wood, A. B.,.....	57 Maiden Lane.

## IRONWORKERS.

Bowden, James,.....	67 8th ave.
Bowes, J. J. & Bro.,.....	242 W. 26th.
Calder, J. C.,.....	235 Centre.
Carney, J.,.....	205 E. 40th.
Carroll, J. J.,.....	141 Wooster.
Cochran, J. S.,.....	195 S. 5th ave.
Cook, Francis,.....	407 W. 36th.
Curry, J. & Son,.....	553 W. 54th.
Day, W. T.,.....	22 W. 3rd.
Dick, W.,.....	554 W. 48th.
Ferdon, S. B.,.....	129 W. 31st.
Fransmann, John,.....	105th, nr. 1st ave.
Fryer, W. J.,.....	413 8th.
Guinard & Son,.....	8 Peck Slip.
Happell, Adam,.....	198 Broome.
Heineman, G.,.....	112 John.
Hoffman & Stader,.....	819 3d ave.
Howell's, H. H. Son,.....	369 W. 11th.
Jackson, James L.,.....	329 E. 28th.
James, John D.,.....	275 Pearl.
Johnson Bros.,.....	215 Grand.
Jones, Alex.,.....	41 Centre.
Kochler, Henry,.....	239 E. 103d.
Lapp, Hy,.....	8 Peck Slip.
McCullough, Sam'l,.....	71 Watts.
McDonnell & Potter,.....	608 W. 55th.
Murray, Peter,.....	146 W. 17th.
Post & McCord,.....	102 Broadway.
Shaw, J. & Co.,.....	173 Christopher.
Van Winkle, F.,.....	36 Sheriff.
Vaughan, E. S. & Son,.....	103 Maiden Lane.
Vreeland, C.,.....	1366 Broadway.

## IRON AND STEEL DEALERS.

Abeel Bros.,.....	190 South.
Adams, Hugh W. & Co.,.....	56 Pine.
Atha, Benjamin & Co.,.....	241 Pearl.
Barnett, Oscar,.....	46 Cortlandt.
Bech, Edward & Co.,.....	69 Wall.
Bonner, John,.....	114 Baxter.
Borden & Lovell,.....	71 West.
Boynton, Geo. A.,.....	70 Wall.
Brookway, M. B.,.....	57 Goerck.
Brown, William,.....	95 John.
Budd & Ellis,.....	105 John.
Carmichael & Emmons,.....	130 Cedar.
Carpenter, Reese,.....	402 Water.
Carpenter, Jas. O. & Co.,.....	59 John.
Carroll, Richard,.....	385 South.
Clarke, B. G.,.....	52 Wall.
Colligan, James E.,.....	134 Leroy.
Cooney, Daniel F.,.....	88 Washington.
Crocker Bros.,.....	32 Cliff.
Danvers, Robert E.,.....	513 E. 17th.
Davis, Geo. T. M.,.....	45 Exchange Place.
Davis, Herbert J.,.....	2 Nassau.
Day, Elias T.,.....	95 Liberty.
Diamond, J. G. & T.,.....	209 W. 35d.
Douglass, Thos.,.....	73 Cedar.
Egleston, Bros. & Co.,.....	166 South.
Ely & Williams,.....	178 1/2 Water.
Firth, Thos. & Son,.....	81 John.

## NEW YORK CITY—Continued.

Freeborn, W. A. & Co.	254 South.
Fritch, E. & Son.	8 Burling St.
Froment, F. L. & Co.	112 John.
Fuller, Bros. & Co.	137 Greenwich.
Goodwin, Robert N.	99 Maiden Lane.
Gorham, Austin G.	51 Wall.
Graphite Steel Co.	231 Broadway.
Green, Thomas.	97 Water.
Harrison & Gillion.	560 Water.
Hernsheim, Louis.	20 Nassau.
Higgins, Hugh.	406 W. 23th.
Hill Edward.	101 Wall.
Hobson, F. & Son.	97 John.
Hopes & Merry.	539 W. 15th.
Hopkins, B.	104 Watts.
Hopkins, E. F.	104 John.
Hopkins, S. T.	240 Pearl.
Hopkins, S. W.	35 Broadway.
Horicon Iron Co.	24 Cliff.
Hotchkiss, Guy C. Field & Co.	624 E. 14th.
Hotchkiss & Nichols.	14 Platt.
Hubbard, Charles.	46 Cliff.
Hugill, Chas.	97 John.
Inness, Thos. B. & Co.	55 Pine.
Jackson, J. H. & Co.	206 Franklin.
Jacobus, E. V.	50 Beekman.
Jessop, Wm. & Sons.	91 John.
Johnston, James.	30 Pine.
Judson, Benj. F.	233 South.
Kursheedt, A.	197 1 earl.
Lang, W. Bailey.	50 Beekman.
Lee, James & Co.	72 Pine.
Lefferts, Marshall & Co.	90 Beekman.
Leng, John S.	4 Fletcher.
Levis, Henry.	132 Broadway.
Lilienberg, N.	176 Fulton.
Lissberger, L. & Co.	46 Cliff.
McArdle & Hart.	356 West.
McBain, Thos. A.	540 W. 46th.
McCoy & Sanders.	43 Chambers.
McCurdy, John.	101 Watts.
Mann & Jones.	4 Hanover.
Marvel, William D.	70 William.
Merritt, Edwin P.	178 Broadway.
Milliken & Smith.	95 Liberty.
Morehouse, Joseph J.	35 Broadway.
Morris, Wheeler & Co.	14 Cliff.
Morse, Fred.	89 John.
Muller, W. H. & Co.	48 Pine.
Naylor & Co.	99 John.
New Jersey Zinc and Iron Co.	52 Wall.
Noyes & Wines.	44 Centre.
Odell, C. H. & E.	104 John.
Ogden & Wallace.	85 to 91 Elm.
Osborn & Kennedy.	115 Chambers.
Oxford Iron Co.	83 Washington.
Pancoast & Rogers.	28 Platt.
Pierison & Co.	24 Broadway.
Pope, Thos. J. & Bro.	292 Pearl.
Post, John.	162 W. 21st.
Prosser, Thomas & Co.	15 Gold.
Quincy, John W. & Co.	98 William.
Richards, James J.	276 W. 25th.
Richards, Daniel W. & Co.	90 Mangin.
Rolet, Pierre.	537 W. 26th.
Sanderson, G. & Co.	30 Gold.
Seymour & Fox Co.	141 Pearl.
Shotwell, John.	57 Maiden Lane.
Smith, Lenox.	55 William.
Springstead, G. T.	261 10th Av.
Stanley Works.	79 Chambers.
Stevenson, Pierson & Co.	49 Wall.
Temple & Lockwood.	12 Platt.
Thompson, J. H. & Co.	32 Pine.
Trimble, M.	21 Cortlandt.
Tyng & Co.	98 William.
Vaughan, E. S.	103 Maiden Lane.
Vought & Williams.	288 Greenwich.
Wallace, W. H. & Co.	10 to 14 Albany.
Walther, Peter.	152 E. 35th.
Wardlaw, S. C. & Son.	95 J. hn.
Warner, A. B. & Son.	28 West.
Weed & Mecum.	82 John.
Westmore & Co.	365 Greenwich.
Whipple, Geo. H., & Hoyt.	56 Wall.
Whitney, A. R. & Co.	58 Hudson.
Williamson, James & Co.	65 Wall.

## NEW YORK CITY—Continued.

Wolff, R. H. & Co.	93 John.
Young, Magaan & Co.	61 William.

## LOCK MANUFACTURERS.

Ahrens, John.	4 Forsyth.
Arnold, C. D.	291 Broadway.
Bayler, Geo.	149 Greene.
Berger, Anthony.	311 W. 26th.
Branford Lock Works.	103 Chambers.
Elbert, Frederick.	117 Prince.
Henzel, George L.	314 W. 36th.
Hopkins & Dickinson Mfg. Co.	84 Reade.
Kedey, James.	220 W. 29th.
King, Jeremiah J.	132 W. 35th.
McWilliams, Jas. H.	96 Chambers.
Moravec, Venzel.	232 2nd.
Mossman, John M.	100 Maiden Lane.
Norwalk Lock Co.	82 Chambers.
Runyon, Alex. L.	103 Chambers.
Russell, Robert A.	256 West.
Stock, Casper A.	116 West.
Tower, John J.	96 Chambers.
Tuck, J. W.	115 Broadway.
Wileox, Wm. Mfg Co.	82 Chambers.
Yale Lock Mfg Co.	53 Chambers.

## MACHINERY DEALERS.

See also Machinists' Supplies.

Allen, H. A.	115 Broadway.
Allen Pneumatic Riveting Machine Co.	304 Broadway.
Aller, A.	109 Liberty.
American Machine Co.	204 Greene.
American Writing Machine Co.	213 W. 31st.
Andrews, W. D., & Bros.	233 Broadway.
Armstrong, J.	132 Church.
Arnoux & Hochhausen Electric Co.	225 E. 20th.
Barnett, O.	46 Cortlandt.
Beggs, James, & Co.	9 Dey.
Belcher & Bagnall.	40 Cortlandt.
Benton, J. B.	30 Cortlandt.
Bigelow, Chas. R.	18 New Church.
Blair-dell, John H.	106 Liberty.
Bockee, John J., Jr.	47 Dey.
Bolander, John G.	5 Bowling Green.
Briggs, H. C.	494 Water.
Brustlein, Surz & Co.	11 Dey.
Budde & Westermann.	50 Vesey.
Bullard, E. P.	14 Dey.
Burns, Jabez, Sons.	3 Worth.
Cammeyer & Sayer.	93 Liberty.
Candee, F. C.	38 Dey.
Carlton, Geo. L.	124 Baxter.
Carroll, John.	264 Water.
Chase, W. L., & Co.	97 Liberty.
Connelley & Co.	407 Broadway.
Cooke & Co.	6 Cortlandt.
Copeland, E. T.	30 Cortlandt.
Craft, Alanson.	268 Water.
Craig Mfg. Co.	55 Broadway.
Dart, Edward.	4th Av., cor. 144th.
Deutsch & Lewis.	323 Broadway.
Dietrich, Chas. F.	414 Water.
Dill, John T.	109 Walker.
Drake, J. H.	7 State.
Dutcher, Godfrey W.	95 Liberty.
Eddy, Geo. B.	398 Madison.
Erie City Iron Works.	45 Cortlandt.
Farley, Robt. Jr.	74 Beaver.
Fitzgibbons, Messer & Co.	65 Crosby.
Forsyth, S. C. & Co.	209 Centre.
Frasse & Co.	62 Chatham.
George, E., & Co.	83 South.
Gleason, R. W.	69 Rutgers.
Grant & Co.	137 Duane.
Gray, John.	37 Dey.
Greene, M. C.	62 Gold.
Hampson, E. P. & Co.	36 Cortlandt.
Hendrie, W. S.	115 Broadway.
Hepworth, S. C. & Co.	260 11th Av.
Hine, F. A.	81 Maiden Lane.
Hoffman, Jacob.	312 Water.
Hogan & Son.	59 Beekman.
Hoyt's Ore Pulverizing & Amalgamating Co.	144th, cor. 4th Av.
Hunt, Chas. W.	111 Broadway.
Ingersoll Rock Drill Co.	1 Park place.

## NEW YORK CITY—Continued.

International Ice & Refrigerating Machine Co....	10 Cortlandt.
Jaeger, G. L.....	136 Mulberry.
Jayne, Wm.....	110 Liberty.
Jennings, D. U.....	118 Liberty.
Jones, F. A.....	13 Park Row.
Jones, L. L.....	210 Front.
Kastenbein Type Setting Machine Co.....	237 B'way.
Kennedy Brick and Tile Machine Co.....	110 B'way.
Klein Ice Machine Co.....	5 Bowling Green.
Leach, Samuel B.....	23 Dey.
Leonard, O. W.....	36 John.
Leonard & McCoy.....	118 Liberty.
Lighthall, W. H., & Co.....	5 Bowling Green.
Little, Chas. E.....	69 Fulton.
McDermot, Walter.....	2 Wall.
McSwegan, Francis.....	287 Water.
Manning, A. C.....	47 Dev.
Manning, Maxwell & Moore.....	111 Liberty.
Maynard, John Q.....	95 Li erty.
Montgomery & Co.....	105 Fulton.
Morey & Sperry.....	94 Liberty.
Motley & Sterling.....	86 John.
Nason, James S.....	109 Liberty.
National Drill & Compressor Co.....	78 Centre.
National Machine Co.....	42 White.
Nelson, W. E.....	83 Dey.
New York Electric Motive Power Co.....	13 Dey.
New York Ice Machine Co.....	10 Cortlandt.
New York Machine Ornamenting Co.....	31 Broad.
New York Mining Machinery Co.....	39 Broadway.
Oastler, W. C.....	43 Exchange Place.
Paar, John.....	102 Av. D.
Parsons, H. F.....	89 Liberty.
Peerless Punch & Shear Co.....	38 Dey.
Pictet Artificial Ice Co.....	142 Greenwich.
Place, Geo., Machinery Co.....	121 Chambers.
Pneumatic Pulverizer Co.....	2 Nassau.
Powers, L.....	58 Centre.
Putnam Machine Co.....	115 Liberty.
Rand Drill Co.....	240 Broadway.
Renton, Chas., & Co.....	229 Broadway.
Roberts, E. E.....	107 Liberty.
Rogers, C. B., & Co.....	109 Liberty.
Rogers, J. F., & Co.....	107 Liberty.
Rose Ice Machine & Refrigerating Co.....	98 John.
Sanborn, Geo. H., & Son.....	51 Beekman.
Schenck, H.....	113 Liberty.
Sellers, W., & Co.....	79 Liberty.
Sinclair Rectifying Machine Co.....	99 Maiden Lane.
Snelling, J. P.....	158 South.
Spencer, B. M.....	106 Liberty.
Squier, Geo. L., & Bro.....	195 Water.
Standbach, Baldwin.....	61 Warren.
Standard Mfg. Co.....	93 Liberty.
Stephens Patent Vise Co.....	41 Dey.
Stimpson, E. B.....	31 Spruce.
Symmes, W. J.....	84 Pike.
Tiers & Co.....	107 Water.
Timby Ore Mill Co.....	4 Broad.
Univrsal Compressor & Pump Co.....	110 Liberty.
Vanbrunt, Cornelius.....	121 Chambers.
Ward & Stanton.....	52 John.
Wexel & De Gress.....	58 Liberty.
Whittier Machine Co.....	91 Liberty.
Wilson, Alphonso.....	46 Cortlandt.
Wilson & Roake.....	261 Front.
Woods S A Machine Co.....	91 Liberty.
Wyman, J. D.....	115 Liberty.
Young, G. G.....	42 Cortlandt.

## MACHINISTS.

Adreance, Garret.....	45 Ann.
Allen, Wm.....	204 E. 29th.
Allen, J. F.....	College Av., nr. E. 137th.
Aller, Amos.....	109 Libertv.
Allewelt, William.....	530 W. 60th.
Almerding, Wm.....	Cortlandt Av., nr. 140th.
Amor & Thompson.....	168 Centre.
Ankele, C., & Co.....	222 William.
Arthur & Carr.....	62 John.
Aspinall, E.....	206 Pearl.
Automatic Parcel Delivery Co.....	291 W. 11th.
Barrett, W.....	42 Hud-on.
Beecker, Chas.....	76 Spring.
Beckett & McDowell Mfg. Co.....	120 Liberty.

## NEW YORK CITY—Continued.

Beith, Geo. S.....	224 E. 129th.
Bender, Philip.....	92 Ann.
Bergeron, C.....	28 W. Houston.
Bevan, W. J.....	30 Great Jones.
Biggart, Robert.....	376 W. 12th.
Birch, John S., & Co.....	38 Dey.
Blasi, John N.....	54 W. Broadway.
Blewitt, James.....	3327th Ave.
Boehner, Adam.....	190 E. Houston.
Bohsert, Frederick.....	387 Bowery.
Boisset, P.....	197 Greene.
Bowden, W. H.....	155 W. 29th.
Boyd & Sullivan.....	295 Fr. nt.
Braidwood, Wm.....	White, nr. Centre.
Brautigan, Joseph A.....	213 Grand.
Broseman, E. & Co.....	90 White.
Brombacher, Charles.....	20 Cliff.
Brown, Addison P.....	45 Gold.
Brown, Augustus P.....	59 Lewis.
Brown, A. & F.....	57 Lewis.
Bruen, Francis M.....	215 Centre.
Buisson, Ignatz.....	108 S. 5th Av.
Bulkley, H. W.....	149 Broadway.
Burns, S. A., & Co.....	2 Howard.
Cairns, William, & Son.....	211 Grand.
Carnie, John A.....	223 West.
Carroll, James T.....	26 Beekman.
Caragnaro, J. & F.....	216 Centre.
Chalmers Spence Co.....	23 John.
Chappell, Geo. F.....	86 Pike.
Cheney, Nathaniel.....	201 Broadway.
Christ, Joseph & P. G.....	96 Fulton.
Clark, Geo. W.....	139 Spring.
Clark, W. E.....	88 Walker.
Coffin, Job B.....	210 Centre.
Copeland & Bacon.....	85 Liberty.
Corbett, Elizabeth.....	155 W. 29th.
Cotton & Hewes.....	41 Centre.
Crampton, Joseph.....	556 W. 27th.
Crook, Herring & Co.....	White, cor. Centre.
Cutting & Winding Machine Co.....	124 Baxter.
Dancel, Christian.....	177 Grand.
Darlington, Thos. H.....	Franklin, nr. Centre.
De Beauvais, Jules.....	1 Howard.
Degener & Clash.....	23 Chambers.
Delamater, C. H. & Co.....	ft. W. 13th.
Demartini, F.....	207 Centre.
Dempwolf, Geo.....	6 Ave. C.
Dickhaus, Henry.....	213 Grand.
Diehl, Peter.....	177 Heister.
Dilig, Christian.....	191 Worth.
Dill, John T.....	147 Centre.
Dobler, Anton.....	253 W. 27th.
Dobler & Lang.....	447 W. 46th.
Dowdall, Patrick J.....	52 W. Broadway.
Dudgeon, Richard.....	24 Columbia.
Dudley, Wm.....	256 Greene.
Dunseith, James.....	533 W. 41st.
Eardley & Winterbottom.....	26 Beekman.
Ebel, Chas.....	90 Crosby.
Ecaubert, Frederick.....	204 E. 29th.
Edison Machine Works.....	104 Cooper.
Edwards, David.....	421 E. 24th.
Edwards, Joseph & Co.....	414 Water.
Ehrenberg, Theodor.....	531 W. 45th.
Ehrsam, Frederick W.....	78 Elm.
Ellis, W. F.....	174 Centre.
Ellis, Wake & Co.....	188 W. Houston.
Elmendorf & Co.....	301 Front.
Elterich, Charles.....	191 Worth.
Ely, Charles.....	345 E. 24th.
Emmerich, Francis.....	191 Worth.
Erlandsen, Napoleon.....	109 Rivington.
Eribeck, Anton.....	88 Suffolk.
Eustace, E. C.....	112 Cedar.
Felder, Rudolph.....	114 Centre.
Feldman, Fred. W.....	25 E. Houston.
Fenton, Charles.....	45 Gold.
Fiederlein, Fred.....	462 10th ave.
Flesche, Chas. D.....	202 E. 29th.
Forsait, S. C. & Co.....	209 Centre.
Forschner, Charles.....	41 Rivington.
Fournier, Edmond & Co.....	145 Mulberry.
Fowler & Rockwell.....	9 Elizabeth.
Freeman, Warren P.....	43 Centre.
Frutts, F.....	385 Broadway.
Fuller Electrical Co.....	41 E. 14th.



## NEW YORK CITY—Continued.

Fyfe, Robert,	415 W. 48th.
Gallant, Eugene,	149 Wooster.
Garcia, Joseph,	125 Worth.
Garvin, E. E. & Co,	139 Centre.
Gaskell, Greenile & Co.,	499 Water.
Gast, Wm.,	43 Ann.
Gebhardt, Frank,	54 Great Jones.
Gem Emery Wheel & Machine Co.,	95 & 97 Liberty.
Geswein, F. W.,	39 John.
Githens, Joseph C.,	247 W. 47th.
Gnadt, John G.,	173 Grand.
Goldsmith, Otto O.,	621 W. 51st.
Griffith, Joseph G.,	103 Elm.
Grimm, Richard,	193 Third ave.
Haas, H.,	37 Green.
Hackett, John,	79 John.
Hallefas W. J.,	259 Front.
Hammond & Rigby,	196 W. Houston.
Hampson, E. P. & Co.,	36 Cortlandt.
Hanan, Marcus,	86 Warren.
Hancock, Henry J.,	4 Liberty Place.
Handren & Robins,	126 Washington.
Hanson, Thomas,	174 Centre.
Harris, Geo. W.,	513 W. 34th.
Hartwick, John & Co.,	276 Water.
Heaton, A. E.,	276 Water.
Heckert Mfg Co.,	22 Union Sq.
Hill, Francis J.,	211 Centre.
Hillmann, Wm.,	251 William.
Hoe, R. & Co.,	506 Grand.
Hoffmann, Conrad,	153rd nr. 3rd ave.
Homer, Henry,	54 Centre.
Hoppen, Joseph E.,	508 Pearl.
Hotchkiss, Guy C. Field & Co.,	624 E. 14th.
Houchin, W. W.,	209 Centre.
Hubbard, Henry N.,	319 E. 22nd.
Huck, G.,	Washington ave. cor. 155th.
Hudner, Frank J.,	209 E. 22nd.
Hughes, Marshall J.,	10 Spruce.
Hungerford, Geo. W. & Son,	824 Fifth.
Hvass, Charles,	625 E. 15th.
Innes, James,	Ft. E. 128th.
Innes, John & Son,	453 West.
Ippich, Rudolph,	207 Centre.
Irvin, Benjamin,	180 Centre.
Jansel, Julius,	292 E. 29th.
Jansel, Andrew,	203 Second.
Jennings, P. J.,	235 E. 41st.
Johnson, Luther A.,	136 E. 13th.
Jonson, J. & Co.,	541 E. 118th.
Jordan, Chas.,	48 Centre.
Juengst, George,	White cor. Elm.
Jungerman, John,	240 W. 27th.
Kampfe Bros	114 Centre.
Katzenstein, L. & Co.,	169 Christopher.
Keating, John, M. D.,	48 Beekman.
Kek & Fisher,	343 W. 37th.
Keler, Joseph W.,	11 Centre.
Kelt n, M. M.,	124 Baxter.
Kendall, Machine Co.,	12 Union Sq.
Kennedy, Daniel,	4 Gold.
Kern, Ernest,	398 8th.
Kern & Wisner,	81 Thomas.
Kerr, Thomas,	1002 First av.
King, Arthur R.,	38 Gold.
Kirms, Edward,	338 E. 23rd.
Kissinger, J. & Co.,	13 Baxter.
Klenk, Carl,	342 E. 31st.
Koch, W. & J. B.,	564 Hudson.
Kolb, Charles,	109 Rivington.
Koebel, Ernest,	398 Eighth.
Kosske, Chas.,	Franklin nr. Centre.
Krom, Stephen R.,	153 Cedar.
Kruse & Murphy Mfg. Co.,	509 First ave.
Kurtz, Francis, P.,	97 Cliff.
Lang, Charles,	447 W. 45th.
Lawson, Benj. S.,	171 Christopher.
Leech & Gothar,	114 Centre.
Lehr, Ferdinand,	60 Chatham.
Leonard, Oxville W.,	36 John.
Lidgerwood Mfg. Co.,	96 Liberty.
Lieb, Chas. A.,	121 Nassau.
Little, J. & Co.,	315 E. 22nd.
Love, J. J.,	213 Centre.
Lynch, James,	80 W. Broadway.
McAdams & Cartwright,	76 Centre.
McCullum, John,	44 Eldridge.

## NEW YORK CITY—Continued.

McCoy & Saunders,	43 Chambers.
McDougall, Chris.,	530 W. 28th.
McFaul & Seddon,	558 W. 34th.
McIntire, Samuel,	71 Rutgers.
McIntosh, Robert A.,	182 Lewis.
McKenzie, Wm.,	508 W. 24th.
McKenzie & Sayre Mfg. Co.,	15 Cortlandt.
McLaughlin & Loyd,	453 Water.
McLean, John,	298 Monroe.
McNeill, Henry,	198 Centre.
McQueed, Charles,	9 Laight.
Matthews, Francis,	57 Ann.
Mellen, Chas.,	52 Exchange Place.
Meserole, Chas. B.,	502 West.
Messer, John J.,	109 Rivington.
Meyer, Frederick,	Franklin nr. Elm.
Miller, Francis J. Jr.,	159 Ludlow.
Moesloin, Valentine,	137 Spring.
Monthemont, Emil,	117 Walker.
Montrose & Martin,	253 W. 27th.
Most, Charles,	White cor. Elm.
Mueller, David,	4 Howard.
Mundt & Creter,	145 Mulberry.
Munzer, William,	509 First ave.
Murphy, Edward,	501 First ave.
Myers, Frederick,	625 E. 16th.
New York Machine Co.,	13 Baxter.
New York Moulding Machine Co.,	154 Nassau.
Noyes, W. Jr.,	218 Centre.
O'Keefe, Henry,	56 W. Broadway.
Panse, F. W.,	124 Baxter.
Parker, Benj.,	75 Fulton.
Parkos, John A.,	White nr. Centre.
Patton, Robert H.,	18 New Church.
Pfister, Jacob,	29 Rose.
Pierce, Jas. D.,	357 West.
Pierres, Murphy & Larkin,	17 Bond.
Pilgram, Morris,	427 W. 13th.
Prentiss, John,	42 Dey.
Prybil, Paul,	465 W. 40th.
Purvis & Price,	109 Washington.
Putnam Machine Co.,	115 Liberty.
Rae, John,	114 Horatio.
Rae & Albinson,	444 Water.
Rau, E.,	46 Centre.
Rau, Martin,	39 Centre.
Reed, James H.,	Franklin cor. Elm.
Remacle, Leopold L.,	191 Worth.
Richards, T. A.,	75 Fulton.
Rilling & Schock,	530 W. 20th.
Richie, Wm. & Co.,	369 1/2 Pearl.
Richter, Herman,	238 Centre.
Rizzolo, Garcia,	59 Crosby.
Roberts, Dwight,	291 W. 11th.
Roede, Erhard,	127 Worth.
Rogers, C. B. & Co.,	109 Liberty.
Ruehl, Paul,	78 Suffolk.
Rushworth, John,	258 W. 28th.
Salter, B. T.,	510 1/2 Pearl.
Schmidt A. & Bro.,	41 Centre.
Schnitz, Jacob,	63 Elizabeth.
Schullmann, Conrad,	18 Marion.
Schulze, W. F. A.,	3 Dutch.
Schwarz, Jo-eph,	24 Lispenard.
Schwenke, Louis F.,	2 Duane.
Sergeant & Cullingworth Co.,	382 Second Av.
Shaffer & Budenburg,	40 John.
Shasty, Otto L.,	163 Mercer.
Sheridan, T. W. & C. B.,	25 Centre.
Simmons, Odell & Co.,	107 W. 18th.
Smith, M. M.,	46 Eldridge.
Smith & Sayre Mfg. Co.,	245 Broadway.
Spies, Frederick,	120 Centre.
Spofford, Charles,	Franklin cor. Elm.
Staehle, Jo-eph,	53 Eldridge.
Standard Hydro-Carbon Machine Co.,	19 Park Pl.
Starr, W. O.,	182 W. Houston.
Starrett, William,	96 John.
Stewart, John,	7 Walker.
Sturm, August,	180 Centre.
Suhr, Emil,	140 Centre.
Sullivan, John W.,	295 Front.
Taylor, A. B., Printing Press & Machine Co.,	5 Hague.
Thompson, Frank,	168 Centre.
Thomson, John W.,	White cor. Elm.

## NEW YORK CITY—Continued.

Thomson, William S.	512 W. 24th.
Tillmann, Charles	51 Ann.
Tisch, Louis	109 Rivington.
Todd, Joseph C. & Simonton	10 Barclay.
Touzet Shoe Fitting Machine Co.	154 Nassau.
Townsend & Irving	180 Centre.
Tunstall & Ford	139 Elm.
Turl, John	534 W. 28th.
Van Allen, G. W. & W. H.	59 Ann.
Vatromela, Domenico	137 Crosby.
Veldt, Herman	94 Greenwich.
Vice, George	Franklin n. Centre.
Vonderlehr, Frederick	193 Worth.
Wagner, F. X.	331 Rivington.
Walter, Wright	541 W. 35th.
Wehler, Frank	643 Third Av.
Wehl, William	109 E. 13th.
Weiler, F. M., Liberty Machine Works	49 Chambers.
Welsh, Robert	82 Walker.
Wendel, Conrad	67 Willett.
Werner, John F.	62 Centre.
Wessmann, Gustav C.	207 Centre.
White, G. W.	201 E. 23rd.
Whitehill, Robert	540 W. 23rd.
Whitford, James	9 Spruce.
Wicks, Geo. W.	174 Centre.
Wiebke, Charles	215 Centre.
Wiggert, David	719 Fifth.
Wilkins, M. P.	381 Broome.
Williams, David T.	15 Spruce.
Winter, Louis F.	418 W. 27th.
Wolf, John G.	166 Greenwich.
Wollenweber, August	45 Chatham.
Wood & Drake	497 Water.
Woodbury Brush Machine Co.	154 Nassau.
Worrall & Co.	28 Elm.
Wuterich, Christian	White n. Elm.
Wyer, Lawrence	47 W. Broadway.
Zeher, Conrad	81 King.
Zeising, Charles F.	7 Bleecker.
Zundorf, John	13 Bleecker.

## MACHINISTS' SUPPLIES.

See also Railroad Supplies.

Aller, Amos	109 Liberty.
Anderson, John G.	115 Broadway.
Armstrong, Frank	132 Church.
Backus, Q. C.	102 Chambers.
Barr, Edward	78 John.
Beggs, James & Co.	9 Dey.
Blewitt, James	332 7th Av.
Carr, A.	62 John.
Cooke & Co.	6 Cortlandt.
Davenport, Johnson & Co.	24 Park Place.
Duyckinck, W. C.	52 John.
Frasse & Co.	62 Chatham.
Frasse, P. A. & Co.	95 Fulton.
Hamilton, T. B.	135 Pearl.
Howard, Geo. C.	6 Cortlandt.
Leonard, O. W.	36 John.
Leonard & McCoy	118 Liberty.
Manning, Maxwell & Moore	111 Liberty.
Marcellus, Chas N. & Co.	69 Varick.
Maynard, J. Q.	95 Liberty.
Middleton, W. S.	52 John.
Montgomery & Co.	105 Fulton.
Patterson, H. T. & Co.	138 Centre.
Place, Geo. Machinery Co.	121 Chambers.
Pollock & Van Wagenen	212 West.
Prentiss, H. & Co.	42 Day.
Rogers, H. A.	19 John.
Rogers, John F. & Co.	107 Liberty.
Varick, Geo. C.	5 Cortlandt.
Walton, Jos. J.	19 Dey.
Washoe Mfg. Co.	115 Broadway.
Wilson, O. C. & K. R.	89 West.

## METAL SPINNERS.

Bassemir, John	41 Centre.
Bohrmann, A. W.	46 Centre.
Coit, Tracy	19 Vandewater.
Durst, William	120 William.
Haas & Hilgner	180 Centre.
Hopfensack, Ernst	34 S. 5th Av.
Kruger & Kruse	209 Centre.

## NEW YORK CITY—Continued.

Schaffert, Leonard	127 Worth.
Schünemann & Swift	207 Centre.
Stachlen, Wm. Jr.	141 Elm.

## NAILS.

Anvil Horse Shoe Nail Co.	69 Washington.
American Tack Co.	116 Chambers.
Ausable Horse Nail Co.	4 Warren.
Borden & Lovell	71 West.
Bridgewater Iron Co.	73 Pearl.
Bruce, Geo. W.	1 Platt.
Dobbin, James	224 E. 44th.
Double Pointed Tack Co.	108 Chambers.
Dunbar, Hobart & Whidden	39 Warren.
Field, A. & Sons	78 Chambers.
Fuller Bros. & Co.	139 Greenwich.
Gibbs, Brvan	80 Mulberry.
Hassall, William	63 Elizabeth.
Hotchkiss & Nichols	14 Platt.
Livingston Horse Nail Co.	113 Chambers.
Loughran, John	59½ Jackson.
Morris, Wheeler & Co.	14 Cliff.
Nelson, Admiral	295 Pearl.
Niles, John O.	115 Worth.
Old Colony Iron Co.	211 Pearl.
Oxford Iron Co.	83 Washington.
Putnam, Henry W.	108 Chambers.
Quincy, John W. & Co.	98 William.
Sheldon, S. W.	93 Reade.
Tiebout, W. & J.	33 Chambers.
Waterman's, L. C. Sons	181 Canal.

## PLUMBERS, STEAM AND GAS FITTERS.

Adam, Sinclair	4 White.
Aden, Henry	74 King.
Ahearn, John	336 Grand.
Ahner, Henry	94 Eldridge.
Ahrens, Charles	1605 1st Av.
Anderson, Frank	2224 2nd Av.
Andrews, Thomas C.	1098 N. 3rd Av.
Andrews & Mullaney	1085 3rd Av.
Armstrong, Barclay	230 Greenwich.
Armstrong, James	5 Murray.
Armstrong, James	100 3rd Av.
Ash & Buckbee	24 Spruce.
Austin, W. P.	142 W. 38th.
Backus, Peter	135 W. 25th.
Baguley, W.	54 W. 29th.
Bailey, John	121 Worth.
Bailey, Thos.	10th Av. cor. W. 151st.
Bailey, W. J.	1582 Broadway.
Bannerman, Arthur	16 Ann.
Barlow, John	105 W. Broadway.
Baron, Michael	56 W. Broadway.
Barratt, Oliver	104 S. 6th Av.
Barratt & Jones	202 E. 32nd.
Barry, John	209 E. 125th.
Barry, Richard J.	978 3rd Av.
Barton, E. G.	164 Grand.
Bassett & O'Meara	79 John.
Bates, O. G.	313 E. 117th.
Becher, Louis	197 Allen.
Beck, F. E. & William	1012 3rd Av.
Becker, Daniel	896 2nd Av.
Becker, John	203 6th.
Beglen, Michael J.	416 W. 42nd.
Bell, John	1532 1st Av.
Hellmer, John	966 3rd Av.
Benson, Geo.	88 Greenwich Ave.
Bentson, B.	481 9th Ave.
Bilz, Conrad	193 Greenwich.
Bishop & Deetjen	210 South.
Blackburn, Peter	42 E. Broadway.
Blake, E. & P.	348 Hudson.
Blakely, John	203 E. 111th.
Blasi, John N.	54 W. Broadway.
Boerner, Morris	7 Bayard.
Bolger, Paul S.	472 4th Av.
Bollacker & Erfort	410 W. 39th.
Bormann, W. H.	2378 4th Av.
Born's, F. A. Son	359 Greenwich.
Boswell, Michael F.	263 W. 125th.
Bowker, Alfred	320 W. 40th.
Bowsky, L. & Co.	843 3rd Av.
Boyce, Geo.	154 3rd Av.
Boyd, Harkness	78 Wooster.
Boyd, Robert	481 9th Av.

## NEW YORK CITY—Continued.

## NEW YORK CITY—Continued.

Boylard, James	2080 3rd Av.
Boyle & Falls	1611 2nd Av.
Brady, Cornelius	74 anal.
Brady, E. J.	60½ Warren.
Brady, John F.	161 W. 10th.
Brady, Philip	861 6th Av.
Brady, Robert	1 S. William.
Brady, Thomas	348 E. 20th.
Brady & Schnell	7 Canal.
Brandt, W. H.	58 Bleecker.
Brennan, F. J.	153 W. 42nd.
Brenner, William	195 Greene.
Brenzinger, Francis	279 Greenwich.
Brien, Timothy	381 Bleecker.
Brown, Geo. B.	E. 125th, cor. 4th Av.
Brunner, William	922 Broadway.
Brutton, John W.	426 8th Av.
Bryan, James	431 Grand.
Buchanan, Edward	354 W. 38th.
Bulmer & Conover	2287 2nd Av.
Burbridge & Bros.	226 W. 22nd.
Burge, Jacob, Jr.	142 2nd.
Burke & Hall	101 W. 56th.
Burn, Geo. B.	551 Grand.
Burnham, W. H.	16 8th Av.
Butcher, John H. & Son	252 Water.
Butcher, Scott	282 7th.
Butler, McAuliffe & Gabay	892 3rd Av.
Byrne, Thomas J.	283 4th Av.
Byrne, B. & Bros.	353 E. 10th.
Byrnes, Christopher	114 E. Broadway.
Byrnes, Patrick J.	100 W. 32nd.
Byrnes & Brady	446 7th Av.
Byrns, John	425 Grand.
Byron, Chas., Jr.	135 Av. A.
Cahill, John M.	1949 3d Ave.
Cain, Michael	668 8th Av.
Calkin, H. C. & J. H.	256 West.
Callaghan, an. Francis	78 4th Av.
Callaghan & Malcolm	1038 2nd Av.
Callahan, Patrick	1568 3rd Av.
Cameron, Alex.	76 8th Av.
Cameron, Samuel	730 9th Av.
Campbell, P. B.	1963 3rd Av.
Campbell, Wm.	31 2nd.
Cantwell, James	980 2nd Av.
Carey, Jeremiah	121 1st Ave.
Carl, Christian	125 Pitt.
Carmichael, Colln	504 9th Av.
Carmichael, Robert	401 W. 33rd.
Carney, Bernard	601 E. 14th.
Carney, Patrick	96 8th Av.
Carragher, Patrick, jr.	332 Monroe.
Carroll, Daniel	57 W. 33rd.
Carroll, Peter	1483 2nd Av.
Carson, Charles	588 3rd Av.
Carter, Thomas	3 Bleecker.
Casey, James	745 1st Av.
Casey, L. & J.	799 8th Av.
Castan, Louis C.	2 2nd.
Cavanagh, James	201 E. 31st.
Cawley & McCabe	255 E. 32nd.
Chambers Benjamin	554 Hudson.
Chambers, Thomas	247 Bleecker.
Chr st, John C.	253 William.
Christman, Louis	624 2nd Av.
Clabby, Patrick	4 Albany.
Clancy, John	257 W. 31st.
Clanranald, Geo. J.	9½ University place.
Clark, S. & A.	130 4th Av.
Clarke, Rutherford	1012 6th Av.
Clarke & Olmstead	467 Canal.
Clavin, Patrick	1162 2nd Av.
Clemens, Francis M.	1632 2nd Av.
Clinchy, Anthony	115 E. 9th.
Coburn, Robert	73 Varick.
Cochrane, Thomas	223 W. 36th.
Cogan, Patrick	48 E. 4th.
Connell, John J.	88 New Chambers.
Connolly, James H.	1278 Broadway.
Connor, Thomas	37 Ann.
Conran, W. F.	307 Pearl.
Cook, John	61 Fulton.
Cook & McCormack	166 E. 33rd.
Cooks, James	208 E. 86th.
Coope, Geo.	473 3d Ave.
Copper, John H.	918 8th Av.

Copman, Charles	108 Av. A.
Coppers, Edward	7 Canal.
Corey, Ed.	858 8th Ave.
Corr, Bernard	146 E. 16th.
Corrigan, John G.	329 E. 35th.
Cranme, F. H.	171 E. 92nd.
Cranston, W. H.	1030 3rd Av.
Creeden, John	167 W. Broadway.
Cromelien, Eugene	92 8th Av.
Crotty, John	45 W. 124th.
Crown, John W.	36 Bayard.
Cummings, James J.	56 W. 27th.
Cummings, Thos. J.	1035 3rd Av.
Cummings, Richard	385 Hudson.
Cunningham, E. B.	32 E. 12th.
Cunningham, M. T.	403 E. 18th.
Curran, James	462 10th Av.
Curtis & Co.	1325 Broadway.
Dahl, Philip	523 5th.
Daily & Tubridge	2187 3rd Av.
Daly, Dennis	622 9th Av.
Daly, James	886 6th Av.
Daly, Philip	809 6th Av.
Davis, John	184 E. 119th.
Davis, W. H.	Third Av. nr. 139th St.
Davis & Treat	1521 Broadway.
Dean, John	85 10th Av.
Deering, John	384 Ninth Av.
Delaney, Chas. H.	607 3rd Av.
Delouest, A. J.	97 Bleecker.
Demartini, F.	207 Centre.
Denwar, W. H.	206 W. 20th.
Desmond, Thomas	145 Hester.
Deutsch, Joseph	20 Clinton.
Deutsch, Max	846 1st Av.
Devine, Thomas	221 Canal.
Dickinson, H. D.	200 E. 50th.
Dilleburg, Jacob	82 Forsyth.
Dinnin, Hugh	77 New.
Dodds, William	21 New Chambers.
Don, Alexander C.	107 W. 36th.
Donaldson Joseph	74 E. 9th.
Donegan, John	956 3rd Av.
Donegan, Roger	293 E. Broadway.
Donegan & Reilly	229 West.
Donnelly, Gerald	365 W. 22nd.
Donnelly, Robert	982 6th Av.
Dooley, E. J.	161 E. 25th.
Dorn, Andrew	179 7th.
Dorre, Richard	11 Roosevelt.
Douglass, Alfred	1233 3rd Av.
Doyle, James	161 Boulevard.
Driscoll, J. W.	318 E. 34th.
Duff, Joseph	69 Montgomery.
Duffy, Michael	73 3rd Av.
Dugal & Levy	232 Greenwich.
Dunn, Geo. H.	543 Pearl.
Dunn, John S.	189 E. 71st.
Dunn, Michael J.	102 4th Av.
Dwyer, John H.	390 6th Av.
Eagleson, James	1669 3rd Av.
Edgar, Alexander	429 Hudson.
Ehrhart, Ferdinand	28 St. Mark's Pl.
Elder, John Jr.	16 W. Houston.
Eldridge, Samuel	Washington Av. nr. 163rd St.
Elgar, John H.	402 W. 34th.
Ellis, John	1214 3rd Av.
Ellison & Todd	206 E. 125th.
Elston, Charles	102 Barclay.
Emminger, Chas. R.	1934 2nd Av.
Engel, Gustav	1608 6th Av.
Ennever, Robert & Son	191 3rd Av.
Ennis & Cook	187 9th Av.
Evatt, E. J.	413 4th Av.
Fabre, Paul	36 S. 6th Av.
Falls, Alexander	1611 2nd Av.
Farrell, Wm	123 W. Broadway.
Farrell & Burns	197 3rd Av.
Fay, James	820 3rd Av.
Fay, Peter	40 Monroe.
Feahan, James	1026 3rd Av.
Feery, Patrick J.	166 E. 33rd.
Fehlinger, Jacob	210 Forsyth.
Feney, Frank J.	190 7th.
Ferrier, John J.	246 Broome.
Fetzer, Leonard	4 Walker.
Field, Chas. E.	113 John.

## NEW YORK CITY—Continued.

Finn, Benjamin W.	186 Forsyth.
Fisher, Frank	175 3rd.
Fisher, Geo. H.	56 W. 28th.
Fitch, Thos. J.	864 3rd Av.
Fitzgibbon, Gerald	109 Canal.
Flaherty, Wm.	244 E. 35th.
Flanagan, Frank	163 E 54th.
Flay, James	147 Christopher.
Fleming, Jas. J. & Co.	52 E. 14th.
Flynn, Thomas H.	13 Elizabeth.
Fogarty, John	74 Maiden Lane.
Foley, Daniel M.	430 Pearl.
Foley, John	385 2nd Av.
Ford, John	62 W. Broadway.
Forster, William	1060 3rd Av.
Foster & McQueen	14 James St.
Fraser, Cauldwell	1516 Broadway.
Frederick, Henry	977 1st Av.
Freely, Alfred	100 W. 15th.
Friedman, Marcus	778 2nd Av.
Friedman, F.	142 2d.
Fuchs, Otto G.	244 E. 42nd.
Gallagher Bros	116 Bleecker.
Gavagan, Christopher	94½ Elm.
Geissler, L.	410 E. 19th.
Geraty, Nicholas G.	1258 3rd Av.
Gerber, Julius	221 6th.
Gerlach, August	3 2nd.
Gernert Adam	731 9th Av.
Gillespie & McDonnell	629 6th Av.
Gillis & Geohagan	116 Wooster.
Gilroy & Reynolds	832 3rd Av.
Gleason, James	42 New Church.
Gleeson, Wm.	220 Av. A.
Gooden, E. M.	128 Greene.
Goodman, Nathan	173½ Division.
Goodrich, L. L.	35 Jane.
Good, Michael	1104 2nd Av.
Gordon, James F.	178 E. 80th.
Gormly, John	978 2nd Av.
Gould, Geo.	158 W. 43d.
Graham, John H.	104 E. 13th.
Graham & Murphy	2319 4th Av.
Grant, John C.	3rd Av. nr. 147th.
Gray, Albert	148 William.
Gray, James	697 Greenwich.
Greene, Edward	264 E. Broadway.
Gregory, John	45 Market.
Gribbin, John H.	54 6th Av.
Griffin & Prior	60 W. 3rd.
Grimes, James	54 Pearl.
Gross, George	201 3rd Av.
Gull, John W.	415 Bleecker.
Gussler, Chas. F.	610 10th Av.
Guy, Joseph	34 Henry.
Haagen, F.	446 6th Av.
Haas, William	61 Grand.
Hackett, Patrick	199 E. 46th.
Hadfield & Duffy	73 Liberty.
Haggerty, Dennis F.	259 W. 14th.
Hahn & Dugan	807 6th.
Haines, John R.	1478 3rd Av.
Haley, Josiah S.	76 Centre.
Hall, Marcus W. Jr.	1104 2nd Av.
Halliday, M.	218 E 9th.
Halpin, John	1540 3rd Av.
Halpin, Matthew	177 E. 110th.
Halpin, Peter S.	1119 2nd Av.
Halpin, Richard	7 Roosevelt.
Halpin, Thomas	1359 3rd Av.
Hamma, Charles	147 Sta. ton.
Hammond, John H.	100 W. 33rd.
Hanna, Samuel	555 Hudson.
Hannemann, John	425 Fifth.
Harmon, Thos. M.	2156 Third Av.
Hartmann, Robert	34 Av. A.
Hartley, T. M. & Co.	114 John.
Haskell, Benj. F.	420 Broome.
Haubennestel, Louis	637 11th Av.
Heatherton, E. J.	35 Ann.
Helferich, Peter	314 W. 39th.
Henderson, Alex. P.	17 E. 17th.
Henderson, James	27 Sixth Av.
Henderson, S. J.	200 W. 21st.
Hennessy, David	1597 Broadway.
Hennessy, William	307 6th.
Henningesen, J. & J.	116 Third Av.

## NEW YORK CITY—Continued.

Herriott, Alexander	Broadway nr. McComb.
Hertel, Francis	975 2nd Av.
Hertels & Roemer	143 E. 13th.
Heuman, Leopold	1303 3rd Av.
Hicinbotham, Geo.	586 9th Av.
Higginson, Alfred	87 Greene.
Hill, George	94 Greenwich.
Hogan, Edward J.	131 Wooster.
Hogan & McDonough	76 W. 56th.
Holboron, Edward B.	425 W. 50th.
Holboron, W. J.	401 W. 24 h.
Holland, Thomas C.	4th Av. nr. E. 77th.
Hollings, Henry	402 E. 14th.
Horsmann, Richard	200 E. 50th.
Hough, G. C.	127 Beekman.
Howarth, Charles	114 Maiden Lane.
Hughes, Edward	147 Greene.
Hughes, Michael	296 E. 81st.
Hughes, Thomas	38 Bleecker.
Hurley, John	4 Clarkson.
Iebal, Henry	74 King.
Inglis, William	119 W. 26th.
Ingram, Arthur	3 4 4th Av.
Irvin, Ralph	1274 3rd Av.
Ivers, Alfred	316 4th Av.
Ivers, William H.	48 E. 23rd.
Jackson, David	213 3rd Av.
Jacobs, E. W.	21 Rector.
Jaehne, E. G.	271 Spring.
Japtok, Carl	156 E. Houston.
Jardine, J.	1673 Broadway.
Jarratt, Thomas	50 W. 30th.
Jenner, J. G.	213 Ave. A.
Jerman, Thomas	346 9th Av.
Johnson, Thomas	206 E. 87th.
Johnstone, John	119 Bleecker.
Jones, C. as W.	304 W. 38th.
Jones, Morgan	67 Centre.
Kane, Francis W.	1080 3rd Av.
Kane, James	304 E. 49th.
Katz, Meyer	163 E. 4th.
Kearney, W. M.	620 10th Ave.
Keating, Thomas	86 Duane.
Keelev, J. D. & Son	57 W. 30th.
Keenan, Andrew	27 Park.
Keenan, James	38 Oliver.
Keibel, Charles	644 9th Av.
Kelly, W. J.	290 8th Av.
Kelly & Jones	202 Greene.
Kemp, William A.	399 Pearl.
Kennedy, Andrew	554 3rd Av.
Kenny, Sarah	264 E. Broadway.
Keppel, John	426 4th Av.
Kerin, Jeremiah	2 Cortlandt.
Kessler, A.	171 Ave. R.
Kiernan, William J.	176 Pearl.
King, Thomas B.	24 John.
Kirkwood, Thomas	52 W. 32nd.
Kistner, John	196 William.
Kitching, Andrew H.	101½ E. 10th.
Klausman & Meyer	2253 3rd Av.
Knapp, Jarvis H.	83 W. 12th.
Kneale, F. S.	121 Prince.
Knight, Daniel	33 W. 29th.
Knight, James N.	66 W. 34th.
Knight, Thomas H.	60 William.
Kranichfelt, Chas. H.	258 Rivington.
Kuemmel, John	229 E. 46th.
Kunkel & Orr	639½ Hudson.
Lahey, Robt.	383 6th Ave.
Lachner & Costello	26 W. Broadway.
Lalor, James F.	411 E. 119th.
Lamarche, Chas. D.	254 E. 74th.
Lamont Chas.	169 W. 34th.
L'Amoureux C. H. & Co.	313 Spring.
Lanahan, Stephen J.	60 Spring.
Lanz, Henry	863 6th Av.
Larkin, W. H.	191 E. 71st.
Lawton, W. A.	416 4th Av.
Leary, James J.	9 Murray.
Leddy, Hugh	877 3rd Av.
Leigh, Patrick	338 Hudson.
Lemarchand, Louis	91 Thompson.
Lenihan & Milliken	133 Canal.
Levon, Abraham	200 E. 40th.
Levy, Lewis	319 Greenwich.
Levy, M.	232 Greenwich.

## NEW YORK CITY—Continued.

Liddell & Edmonds	688 6th Av.
Lightbody's C. Sons	152 Front.
Liney, Bartlett	460 8th Av.
Lissner & McGowan	1404 3rd Av.
Locke & Munroe	1341 Broadway.
Logan, Lawrence	140 W. 11th.
Logan & Stephens	20 Dey.
Lorenze, Joseph L.	213 1st Av.
Low, Alexander	951 7th Av.
Lyons, David	26 James.
McAdie, John Jr.	777 Washington.
McAllister, H. W.	1891 3rd Av.
McAuley, Thomas	1374 3rd Av.
McCabe, William	110 6th Av.
McCallum, Alexander	304 W. 41st.
McCarron, John	915 6th Av.
McClellan, Jas. H.	172 8th Av.
McConnell, John J.	1128 3rd Av.
McCord, Randolph	484 Broome.
McCormick, James	8th Av. cor. W. 126th.
McCreery, Hugh	937 3rd Av.
McDermott, John	868 8th Av.
McDermott, Patrick	E. 177th, nr. R. R. Av.
McDougall, Daniel	198 E. 74th.
McElraery, David	944 8th Av.
McGinnis, Owen	47 Pitt.
McGowan, Hugh	151 E. 20th.
McGowan, Roger	256 W. 32nd.
McGrann, Bernard	197 8th Av.
McGuckin, Henry	951 6th Av.
McGuckin, H. J.	1239 3rd Av.
McGuire, Francis	43 Cedar.
McGuire, James	36 Market.
McIndo, James	425 3rd Av.
McInerny, Michael	568 2nd Av.
McKeon, Bartholomew	818 6th Av.
McKinley, Edward	90 Crosby.
McKnight, Robert W.	746 9th Av.
McLaughlin, J.	157 W. 41st.
McLaughlin, Charles	Broadway, nr. W. 131st.
McLaughlin, J., & Co.	8th Av., cor. W. 126th.
McLean, E. A.	3rd Av., nr. 166th.
McLoughlin, Patrick J.	499 W. 42nd.
McLoughlin, Wm.	622 3rd Av.
McMahon, Thos. F.	2 Marlon.
McManus, Nicholas	101 Greenwich.
McManus, Thos. J.	348 Madison.
McManus, W. B.	43 Suffolk.
McMurray, Charles	11 Clinton.
McQuade, Hugh	1482 2nd Av.
McQuiston, J.	102 W. 14th.
McSorley, Alexander	387 Bowery.
Macdonald, Jos. A.	296 6th Av.
Mackenzie, John	2 E. 60th.
Mackenzie, William	109 W. 30th.
Mackey, Joseph	57 Norfolk.
Madden, Henry	200 W. 30th.
Madden, W. E.	94 Prince.
Magrain, Wm.	487 3rd Av.
Maguire & Co.	182 Canal.
Maion, Patrick	422 7th Av.
Maloney, James	1038 2nd Av.
Malcolm, Samuel L.	49 Nassau.
Mallon, Peter	458 N. 3rd Av.
Malone, Daniel	504 5th.
Maloney, Peter	2165 2nd Av.
Mara, James	141 E. 16th.
Mara, William	203 E. 16th.
Marquiz, Louis	238 E. 16th.
Marsh, W. E.	256 6th Av.
Martin, W. & Brother	122 Av. C.
Marvin and Hilton	42 Maiden Lane.
Masteron Jas.	57 Ann.
Mathews, Francis	12 Broadway.
May, John	2253 3rd Av.
Mayer, Rudolph	141 Greenwich.
Mayrose, Henry	992 6th Av.
Mead Brothers	11 E. 14th.
Mead & Rossman	60 Centre.
Mead, Patrick	179 Clinton.
Meade, Thomas	792 9th Av.
Meehan, Christopher	234 W. 16th.
Mellor, Henry	404 W. 17th.
Mellor, Joseph	276 W. 43rd.
Mellor, Thomas	303 Bleecker.
Mellor, William	200 W. 21st.
Mellor Bros	

## NEW YORK CITY—Continued.

Melville, David	10th Av., nr. W. 164th.
Merritt, Chas.	302 W. 20th.
Michel, Ferdinand	103 E. 9th.
Michel, George	91 Beaver.
Miller, John	753 7th Av.
Miller, John R.	2126 2nd Av.
Miller, W. H.	58 New Chambers.
Mills, Abner B.	127 Av. D.
Mills, A. C.	184 E. 109th.
Mills, James	216 Mulberry.
Missall, Chas.	785 10th Av.
Mitchell & Co.	1067 2nd Av.
Mitchell & McMein	113 Hudson.
Moeschen, Louis	586 3rd Av.
Moloney & O'Donnell	259 South.
Molten, C. L.	325 4th Ave.
Monaghan, Matthew	225 Bleecker.
Montgomery, John	59 E. 9th.
Moore, James	328 E. 122nd.
Moran, James	275 9th Av.
Moran & Brown	135 Liberty.
Moran, W. T.	294 2nd.
More, James	325 W. 64th.
Morgan, Thomas	1028 4th Av.
Morrell, W. H.	77 Front.
Morris, Martin E.	4 Liberty Place.
Morris, Max	171 Division.
Morton & Bathe	945 6th Av.
Mueller, Gustav	21 Hudson.
Muir, James	29 E. 18th.
Mulholland, Henry	212 9th Av.
Mullay, Thos. W.	350 6th Av.
Mullen & Kenney	201 Clinton.
Mulligan, M.	225 Bleecker.
Muller, Cuno	727 7th Av.
Mulvaun, John	2289 1st Av.
Murphy, Edward	591 3rd Av.
Murphy, John & Co.	65 Exchange Place.
Murphy, Michael	468 4th Av.
Murphy, T.	228 E. 106th.
Murray, Patrick	102 4th Av.
Nadebor, Moritz	60 Stanton.
Nally, Chas.	255 E. 40th.
Neal, John & Co.	226 Grand.
Neff & Roos	167 Suffolk.
Nevin, Samuel	61 Oak.
Newman, Jas.	56 Prince.
Newman, Jas.	260 Bowery.
New York Plumbing, Building & Mfg. Co.	148 E. 25th.
Noble, William	174 E. 120th.
Nordinger, J.	288 E. 10th.
Norris & Williams	114 6th Av.
Norton, H. Z. & E. D.	2315 4th Av.
Nugent, James	176 Grand.
Nunnery, John	235 7th Av.
O'Brien, James	651 6th Av.
O'Brien, W. J.	2427 1st Av.
O'Connell, T. & Bro.	250 E. 83rd.
O'Connor, E. J.	488 3rd Av.
Odell, James	91 Christopher.
Ogden, M. E.	1000 6th Av.
O'Neill, Felix	295 7th Av.
O'Neill, James	254 W. Houston.
O'Neill, B. & F.	578 9th Av.
O'Neill, James F.	200 W. 12th.
Orpheus, E.	586 3d Ave.
Orr, Alexander	19 W. 11th.
Orth, G. A. J. M.	25 Frankfort.
O'Sullivan	1420 3rd Av.
O'Toole, F. H.	242 6th Av.
Owens, John F.	256 9th Av.
Pache, Chas	120 Essex.
Palmer, William	268 W. 34th.
Pasco & Palmer	1293 Broadway.
Patterson, Thomas	112 Water.
Patten, W. G.	220 Canal.
Pearson & Denike	616 6th Av.
Pettit, Joseph F.	46 Av. C.
Pfetschinger, Fred	165 W. 25th.
Phillips, Cornelius J.	22 E. 34th.
Philp, James	1667 Broadway.
Pierson, Thomas	34 2nd Av.
Piggott, Edward	158 7th Av.
Pinkerton & Stuart	329 4th Av.
Pisch, F. C.	329 6th.
Pitt, W. A.	907 6th Av.

## NEW YORK CITY—Continued.

Platt, John.....	270 W. 40th.
Pleickhardt, Christian.....	11 Av. B.
Power, Nicholas N.....	15½ Mulberry.
Price, Henry C.....	112 E. 14th.
Price, John Jr.....	39 Columbia.
Pringle, J.....	287 10th Av.
Pryor, James S.....	2410 4th Av.
Quick, Wm. H.....	1206 3rd Av.
Quick Bros.....	267 W. 15th.
Quin, Joseph P.....	8 W. 4th.
Radigan, John.....	763 3rd Av.
Rafferty, Dennis.....	492 10th.
Ransom, Stephen.....	137 Charlton.
Reagan, Bartholomew.....	270 W. 40th.
Reagan, W. H.....	192 Bleeker.
Regan, John.....	72 Park Place.
Reid, James M.....	Fordham.
Reilly, John.....	1071 3d Ave.
Reilly, Peter J.....	227 7th Av.
Renahan, John.....	162 E. 35th.
Reynold, Gustave.....	237 William.
Reynolds, Lawrence C.....	201 E. 57th.
Richards, W. H.....	49 University Place.
Richert, Alexander.....	47 W. 3rd.
Riggins, Geo. B.....	741 E. 9th.
Rile, H. E.....	1600 3rd Av.
Roddy, Wm.....	169 1st Av.
Ronner, H., & Son.....	123 W. Broadway.
Rooney, John.....	425 E. 15th.
Rosenbaum, Daniel.....	111 Norfolk.
Rosonwald, Wm.....	2321 4th Av.
Ross, James.....	55 8 h Av.
Rothenburger, Gottlieb.....	410 6th Av.
Rowlands, E. J.....	3 Norfolk.
Rush, W. G.....	237 W. 46th.
Ryan, Wm.....	316 Hudson.
Ryan & Delaney.....	128 4th Av.
Ryan, Devaney.....	778 6th Av.
Salamon, Simon.....	50 Essex.
Samuels, Max.....	103 Av. D.
Sands, Alfred B.....	126 Beekman.
Sarvis, Chas. H.....	158 Clinton.
Schader, J.....	145 W. Broadway.
Scheer, Louis.....	2321 3rd Av.
Schepperd, George.....	Fordham.
Schiffers, Martin.....	128 1st Av.
Schinnager, John.....	171 William.
Schlageter, Joseph.....	402 E. 21st.
Schlarb, Chas.....	92 1st Ave.
Schlatter, Julius E.....	533 Canal.
Schlusser, Henry B.....	130 3rd.
Schlueter, Frederick.....	139 E. 4th.
Schmidt, John.....	231 Rivington.
Schoen, Charles.....	74 Allen.
Schrack, H. C.....	32 Carmine.
Schwank, Chas. Jr.....	269 W. 35th.
Schwarz, Frederick.....	107 E. 4th.
Scott & Newman.....	151 9th Av.
Sears & Price.....	152 William.
See, J. & Son.....	862 8th Ave.
Sehner, W. F.....	120 Delancey.
Sexton, Michael.....	1112 3rd Av.
Sharp, Jas. A. & Bro.....	17 W. 44th.
Sheehan, C. F.....	397 9th Av.
Sheehan, John & Son.....	150 E. 23rd.
Sheehan, William.....	172 Centre.
Sheilds & McEvoy.....	167 Crosby.
Sheridan, James F.....	800 Eighth Av.
Sherman, Chas. S.....	226 Centre.
Shumway, Isaac O.....	392 4th Av.
Simmons, Philip.....	175 Prince.
Simmons, O'Dell & Co.....	107 W. 18th.
Simpson, Alexander.....	202 E. 25th.
Simpson, John.....	769 9th Av.
Sims, Alfred.....	54 Nassau.
Slattery, J. & J.....	152 E. Broadway.
Smith, A. R.....	244 E. 42d.
Smith, Emmet H.....	513 Grand.
Smith, Isaac P.....	10th Av. cor. W. 100th.
Smith, John.....	362 8th Av.
Smith, John B.....	158 Maiden Lane.
Smith, Michael.....	61 Bleeker.
Smith, Philip.....	181 6th Av.
Smith, Thomas.....	2 Allen.
Smith, Thomas J.....	16 Ann.
Smith, Geo. & Son.....	3rd Av. nr. 145th.
Smith & Dowling.....	2 Rector.

## NEW YORK CITY—Continued.

Smith & Fuchs.....	244 E. 42nd.
Smyth, Chas. S.....	156 E. 29th.
Smyth, John P.....	100 Maiden Lane.
Spence, John.....	9 7th Av.
Stadler, Henry A.....	892 3rd Av.
Stadtman, A.....	116 3d Ave.
Steele, George & Sons.....	3rd Av. nr. 140th.
Steubing, Henry.....	900 3rd Av.
Stewart, Geo.....	127 W. 39th.
Sticker, Wm.....	280 E. 4th.
Stinson, Stephen.....	454 W. 19th.
Stout, August.....	761 3rd Av.
Stroh, L. H.....	864 8th Ave.
Stuard, Wm.....	80 3rd Av.
Studley, W. H.....	161 E. 44th.
Stumm, Robert.....	95 Henry.
Sullivan, David.....	59 W. 28th.
Sullivan, John J.....	1439 Broadway.
Sullivan, Timothy.....	103 E. 17th.
Sullivan & Gorman.....	68 Maiden Lane.
Sweeney, Michael A.....	577 Grand.
Swift, John.....	904 8th Av.
Taggart, David.....	97 Mercer.
Taggart, Robert Jr.....	593 Hudson.
Taylor, Edward.....	545 Hudson.
Taylor, Hugh M.....	81 Broad.
Teets, C. E. & Co.....	507 8th Ave.
Teets, David H.....	47 W. Broadway.
Thatcher, James.....	61 Centre.
Thole & Gray.....	148 E. 19th.
Thomas, Geo. H.....	21 Greenwich Av.
Thompson, James.....	86 Sullivan.
Thompson, Matthew.....	508 Canal.
Thomson, Andrew L.....	11 John.
Thornton, Thos. H.....	Boulevard cor. W. 106th.
Thwaites, Geo.....	19 Old Slip.
Timpson, W. B.....	267 W. 47th.
Tivy, Lawrence.....	24 John.
Toffier, Alexander.....	22 Centre.
Toumey, John.....	124 Park Av.
Townsend, Thomas C.....	151 4th Av.
Travers, Wm.....	139 E. 12th.
Treanor, Philip.....	129 W. 19th.
Trede, Geo. C.....	W. 55th cor. 10th Av.
Tucker, Chas.....	31 W. 11th.
Tucker, James.....	2331 4th Av.
Tuite & Carroll.....	500½ W. 50th.
Tu-mey, Thomas J.....	200 E. 72nd.
Turkowsky, Amanda.....	6 2nd Av.
Vail, William.....	64 University Pl.
Vanduzer, Jas. A.....	428 E. Houston.
Vanoordt, M. P.....	468 8th Av.
Vantine, Thos. H.....	79 6th Av.
Veritanz, Geo. N.....	223 Bowery.
Vermilyea, E. L.....	75½ E. 125th.
Vezina, John.....	19 6th Av.
Volkman, Henry G.....	685 6th Av.
Wagner, Chas. H.....	10th Av. nr. W. 159th.
Walker, James.....	115 Cedar.
Wallace, James L.....	435 9th Av.
Wallace, Robert.....	201 E. 58th.
Waller, Rufus N.....	302 W. 36th.
Walsh, A. J.....	773 4th Av.
Walsh, Samuel.....	484 Greenwich.
Walsh, William.....	416 6th Av.
Ward, John L.....	2042 3rd Av.
Ward, Robert W.....	909 6th Av.
Ward, William.....	35 Centre.
Wares, J.....	76 8th Ave.
Warren, Samuel S.....	662 6th Av.
Weathered, T. W.....	46 & 48 Marion.
Webb, Matthew.....	268 8th Av.
Webb, Samuel Jr.....	1677 Broadway.
Webb, W. W.....	2 2nd.
Wenzel, John.....	432 E. 16th.
Werbstein, Charles.....	166 Orchard.
West, Charles.....	37 W. Broadway.
Whealen, James.....	58½ W. 24th.
Whearty, John F.....	408 2nd Av.
Whitaker, John J.....	2155 3rd Av.
Whitelaw, Alex. L.....	391 4th Av.
Whitfield, James M.....	262 Water.
Wiegand, Henry K.....	346 Broome.
Willett, Joseph H.....	881 6th Av.
Willett, M.....	215 William.
Wilson, A. W.....	178 3rd Av.
Wilson, W.....	590½ Broome.

## NEW YORK CITY—Continued.

Wilson, Geo. & Son.....	178 3rd Av.
Wilson, Michael.....	530½ Broome.
Winterbauer, Louis.....	158 Canal.
Wisel, Adolph.....	582 3rd Av.
Wolf, John G.....	168 Greenwich.
Wood, John.....	66 Broad.
Wood, Bros.....	243 A. A.
Woodgate, Henry.....	319 W. 43rd.
Woodward, Mary A.....	83 Centre.
Young, Peter.....	206 West.
Young, William.....	169 Thompson.
Young, William & Bro.....	1022 3rd Av.
Zahn, Geo.....	33 Delaney.
Zang, Henry.....	167 Ludlow.

## PLUMBERS' SUPPLIES.

Abendroth Bros.....	109 Beekman.
Adee, Frederick.....	52 Cliff.
Aspinall, Edwin.....	206 Pearl.
Barr, Edward.....	78 John.
Bartholomew & Co.....	84 Marion.
Bas-ett & O'Meara.....	79 John.
Blakslee, E. G. & Co.....	80 Centre.
Bonner & Vancourt.....	243 Canal.
Brady, Alfred.....	43 Greene.
Bryan, Joseph C.....	79 Centre.
Bulger, James Jr.....	25 Centre.
Carr, Adam.....	62 John.
Clark, Minford S.....	124 Baxter.
Colwell Lead Co.....	63 Centre.
Craige, H. H.....	5 Murray.
Creque, Ronalds & Co.....	54 Cliff.
Donnelly, P. T. & Co.....	207 E. 22nd.
Dubois, F. N.....	510 W. 30th.
Foster, A. T.....	73 Beekman.
Harrison, Charles & Co.....	16 W. 4th.
Hepe & Co.....	455 West.
Hoare, John.....	79 Centre.
Huber, Henry & Co.....	85 Beekman.
Hussey, William H.....	135 W. 30th.
Jenkins Bros.....	71 John.
Jennings, Alfred E.....	7 Burling Slip.
Johnson, Henry F.....	1 Desbrosses.
Kennedy, Daniel.....	4 Gold.
Keyser, J. F.....	239 E. 9th.
Knapp Mfg. Co.....	24 Frankfort.
Lowe & Brother.....	263 W. 12th.
McNab & Harlin Mfg. Co.....	56 John.
McShane, William & Co.....	1344 Broadway.
Maddock, T.....	273 Pearl.
Maxwell, Geo. L.....	259 West.
Mayor, Lane & Co.....	42 Mott.
Meyer, Henry C. & Co.....	48 Cliff.
Michel, Ferdinand.....	103 E. 9th.
Miller & Coates.....	279 Pearl.
Morahan, Bernard.....	20 Vesey.
Morrison, David.....	55 W. 16th.
Mott, J. L. Iron Works.....	88 Beekman.
Myers, Andrew J.....	94 Beekman.
Nason Mfg. Co.....	71 Beekman.
Nelson & Finkel.....	439 E. 10th.
New York Plumbing, Bldg. & Mfg. Co.....	148 E. 125th.
Ogden, Chas. S.....	52 Ferry.
Peck Bros. & Co.....	73 Beekman.
Perrine, W. W.....	273 Pearl.
Robinson, C. E. & Co.....	31 E. 10th.
Sanitary Trap & Plumbers' Supply Co.....	145 B'way.
Saxon & Pennell.....	97 Maiden Lane.
Soffe, Henry.....	179 Grand.
Stewart & Co.....	312 Pearl.
Susemhl, Theo.....	62 John.
Tatham & Bros.....	135 W. 30th.
Thompson, Ge. O.....	79 Centre.
Urquhart, John S.....	46 Cortlandt.
Urquhart & Livingston.....	81 Thomas.
Walfaeer & Wood.....	61 Beekman.
Walsh, Samuel.....	464 Greenwich.

## RAILROAD SUPPLIES.

See also *Machinists' Supplies.*

Adam, John F.....	55 Pine.
Albertson, D. T.....	95 Liberty.
Allen Paper Car Wheel Co.....	240 Broadway.
Aller, A.....	109 Liberty.
American Mfg. Co.....	176 Broadway.
American R. R. Switch Plate Co.....	21 Cortlandt.
Ashcroft, John, Mfg. Co.....	40 John.

## NEW YORK CITY—Continued.

Atwood Railway Wheel Co.....	57 Astor Ho.
Barr, Edward.....	78 John.
Barrows & Co.....	64 Broadway.
Beadle & Courtney.....	1193 Broadway.
Beardsley, D. N. & Co.....	9 Murray.
Beggs, James & Co.....	9 Dey.
Blewitt, James.....	332 7th Av.
Brooks, E. J. & Co.....	10 Cortlandt.
Campbell, W. H.....	19 Union Square.
Chapman, Henry S.....	35 Broadway.
Child & Oliver.....	59 Liberty.
Claffy, John.....	48 Dey.
Clark, Geo. W. & J. H. Adams.....	243 Broadway.
Clarkson, John W.....	94 Cliff.
Clifton, C. W.....	54 William.
Collins & Co.....	212 Water.
Colwell & Canning.....	115 Broadway.
Conant & Smith.....	6 Cortlandt.
Conklin Electric Signal Co.....	340 3rd Av.
Cooke & Co.....	6 Cortlandt.
Courtenay & Trull.....	17 Dey.
Creamer, W. G. & Co.....	96 John.
Curtis, Paul A.....	20 College Place.
Dana & Co.....	20 Nassau.
Danforth, C. E. & Co.....	71 Broadway.
Delafield & Chapman.....	95 Liberty.
Dessau, N.....	56 Warren.
Dinsmore, C.....	21 Cortlandt.
Duyckinck, W. C.....	52 John.
Dwight, H. B.....	30 Platt.
Eames Vacuum Brake Co.....	15 Gold.
Earl Electric Alarm Gauge Co.....	56 Worth.
Edison Recording & Alarm Gauge Co.....	91 Liberty.
Edmonds, J. W.....	270 West.
Evans, Geo. A.....	74 Wall.
Falding, F. G.....	2 Nassau.
Finney, N. S. & Co.....	52 Broadway.
Fiske, A. P.....	19 Nassau.
Footo, Cleveland.....	40 Broadway.
Godefroy & Co.....	43 New.
Gravity Lock Co.....	21 Cortlandt.
Green, Tweed & Co.....	118 Chambers.
Hall, Haydon H.....	52 Broadway.
Hamilton, Theodore B.....	135 Pearl.
Hanlenbeck, J. H.....	39 Park Row.
Herrick, Bauman L.....	98 John.
Hoole M'fg Co.....	46 Bond.
Hotchkiss, Guy C. Field & Co.....	624 E. 14th.
Hull, Geo. G.....	40 Broadway.
Inness, Thomas B. & Co.....	55 Pine.
Jacobus, E. Y.....	50 Beekman.
Jesup, F. W. & Co.....	67 Liberty.
Johnston, J.....	30 Pine.
Kansas Rolling Mill Co.....	52 William.
King & McTigue.....	54 Wall.
Knapp Mfg Co.....	22 Frankfort.
Leavitt, Chas. W.....	161 Broadway.
Leonard, O. W.....	36 John.
Le Roy Journal Bearing Co.....	145 Broadway.
Llera, Josquin.....	77 William.
McAnerny, John & Co.....	87 New Church.
McCoy & Sanders.....	43 Chambers.
McCullough, R.....	632 1st Ave.
McLean, Malcolm D.....	145 Broadway.
Mandel, A. G. & Co.....	26 Burling Sl.
Manning, Maxwell & Moore.....	111 Liberty.
Martin, Richard.....	116 John.
Mengis, Morris C.....	32 Pine.
Mercha t & Co.....	Cliff cor. Beekman.
Middleton, W. S.....	52 John.
Miller, Ezra.....	6 Park Pl.
Miltimore Car Axle Co.....	145 Broadway.
Montgomery & Co.....	105 Fulton.
Motley & Sterling.....	86 John.
National Car Spring Co.....	13 Barclay.
National Spike M'fg Co.....	E. 136th nr. 4th Av.
Naylor & Co.....	99 John.
Nelson Tool Works.....	632 1st Av.
New England Car Spring Co.....	215 E. 33rd.
New York Steam Forge Co.....	532 W. 16th.
Nottingham Mfg. Co.....	176 Broadway.
Oakman, Walter G.....	18 Wall.
Odell, C. H. & E.....	104 John.
Ormiston, Thos. S.....	7 Nassau.
Patten, James T.....	162 Broadway.
Peck's, Chas. A., Son.....	115 Broadway.

## NEW YORK CITY—Continued.

Perkins & Choate	23 Nassau.
Pollock & VanWagenen	212 West.
Pratt, Daniel R.	21 Cortlandt.
Prentiss, H. & Co.	42 Dey.
Prowser, Thomas & Son.	15 Gold.
Pryce, Josiah B.	40 Broadway.
Rexford & Co.	135 Pearl.
Roberts, John J.	54 Pine.
Rogers, Henry A.	19 John.
Rogers, J. F. & Co.	107 Liberty.
Saxton & Pennell	77 Maiden Lane.
Schlesinger, Oscar L.	112 Pearl.
Smith, Calvin A.	113 Liberty.
Smith, Lenox	55 William.
Spencer, Benj. M.	106 Liberty.
Standard Empire Vacuum Brake Co.	57 Cedar.
Standard Railway Joint Co.	6 Cortlandt.
Stetson, H. C.	140 Nassau.
Strong, J. M. & Son.	60 Liberty.
Suspension Car Truck Mfg Co.	17 Broad.
Tallman Automatic Car Brake Co.	32 Astor Ho.
Thorne, Chas. T.	35 Pine.
Tillotson, L. G. & Co.	5 Dey.
Turner, Thomas	21 Cortlandt.
Union Car Gearing Co.	95 Liberty.
Union Iron & Steel Co.	54 Will am.
U. S. Concave Spring Company.	21 Cortlandt.
Urquhart, John S.	46 Cortlandt.
Vanderbilt & Hopkins	120 Lib-rt.
Walden, J. H.	27 Hubert.
Walker, H. R.	58 Broadway.
Walton, Joseph J.	21 Dey.
Welch & Barnum	54 William.
White & Crowell	235 West.
Whiton, Augustus S.	58 Broadway.
Whiton, E. N. & Co.	69 Liberty.
Wilkins, William B.	115 Broadway.
Young & Co.	61 William.

## SAW MANUFACTURERS.

American Saw Co.	22 Platt.
Boynton, E. M.	80 Beekman.
Byrne, Daniel	382 Cherry.
Combined Power Co.	13 Dey.
Conn, Richard	76 Rutgers St.
Cuddy, William	108 Hester.
Eyre, Elizabeth	135 Lewis.
Hoe, R. & Co.	506 Grand.
Holden & Reed	305 Cherry.
Lawson, Lewis	133 9th Av.
McDermott Bros. & Koberlein	508 W. 24th.
MacCinchey, W. H.	158 Lewis.
Oldham, Joshua	White cor Elm.
Worrall & Co.	28 Elm.

## SHIPSMITHS.

Atkinson, T. W.	84 West.
Bailey, Geo. E.	185 Bank.
Baker, Jacob	519 W. 38th.
Burns & Mortimer	88 Pike.
Chapman, Phineas P.	255 South.
Cullen & Carey	212 West.
Dorethy, W. F.	130 Leroy.
Gaskell, Greenlie & Co.	499 Water.
Goldbol, James	18 James St.
Hall, Isaac	124 Broad.
Hall, William A.	258 South.
Henderson, James	332 Front.
Jones & Lewis	253 South.
Kelly, James	351 Stanton.
Knights, James	38 Cortlandt.
Lane, Augustus R.	225 South.
McBain, Thomas A.	540 W. 46th.
Marino, George	234 South.
Maloney & O'Donnell	259 South.
Myers & Reybert	101 Market.
Rennison & Brown	35 Dover.
Roberts, Robert	210 1/2 South.
Schmelzle & Mount	386 South.
Sutherland, James	160 Maiden Lane.
Swift, Joshua E.	429 W. 13th.
Varick & Hawkins	369 West.
Watson, Thomas	388 11th Av.

## SEAM ENGINES.

Allen, H. A.	115 Broadway.
Aller, A.	109 Liberty.

## NEW YORK CITY—Continued.

Baxter Steam Engine Co.	118 Liberty.
Belcher & Bagnall	40 Cortlandt.
Boulter, James	79 John.
Cobanks & Theall	65 Bethune.
Cammyer & Sayre	93 Liberty.
Cooke & Co.	6 Cortlandt.
Danforth Locomotive and Machine Co.	115 Broadway.
Davenport, James B.	332 Water.
Erie City Iron Works	45 Cortlandt.
Fletcher, W. & A.	268 W. St.
Gleason, R. W.	516 Water.
Hamilton, Theodore B.	135 Pearl.
Hampson, E. P. & Co.	36 Cortlandt.
Handren & Robins	128 Washington.
Hartford Engineering Co.	72 Astor House.
Leonard and McCoy	118 Liberty.
Locomotive Engine Safety Truck Co.	46 Cortlandt.
Love, John J.	213 Centre.
Lyons, H. B.	45 Cortlandt.
Merriam Arthur L.	38 Cortlandt.
New York Steam Power Co.	58 Ann.
Reynolds, Geo. H. & Co.	10 Cortlandt.
Roach, John, & Son	814 E. 9th.
Roberts, Edward E.	107 Liberty.
Rushworth, John	258 W. 28th.
Schwartz, Christian	108 Liberty.
Sherrill Roper Air Engine Co.	93 Washington.
Snyder, Ward B.	106 Liberty.
Todd, J. C. & Simonton	10 Bar-lay.
Waldren Engine & Pump Co.	21 Nassau.
Welch & Lawson	203 Centre.
Wells Balance Engine Co.	88 Liberty.
Wilson & Roake	261 Front.
Young, Gilbert G.	42 Cortlandt.

## MISCELLANEOUS.

Abele, Christian, Millwright	253 W. 27th.
Adamson, S. E., Mfr. Pattern Letters	9 Murray.
Alsop, John Millwright	450 W. 27th.
American Gas Machine Mfg. Co.	256 W. Houston.
American Steam Motor Co.	180 Broadway.
American Tool Co., Mfrs. Tools	116 Chambers.
Arnold, S. B., Mfr. Edge Tools	191 Lewis.
Ashcroft, John, Mfg. Co.	Wrought Iron Grate Bars, 40 John.
Ashcroft Mfg. Co.	Mfrs Steam Gauges, 111 Liberty.
Bass, S. W., Mfr. Screws	38 Pine.
Belcher, J. H., Mfr. Steel	44 Astor Ho.
Bruce, Geo. W., Mfr. Screws	1 Platt.
Boland, C. M., Mfr. Sewing Machines	194 Elm.
Boynton & Richardson	Mfrs. St. ves, 94 Beekman.
Bingham & Webb	Mfrs. Elevators.
Briner Bros., Mfrs. Steel Springs	54 Rutgers.
Cameron, A. S., Steam Pump Works	433 E. 23rd.
Carnegie, Andrew, M. r. Steel	55 Broadway.
Cary & Moen, Mfrs Steel Springs	234 W. 29th.
Champion Belt Hook Co.	110 Liberty.
Chatillon's, John, Son, Mfrs. Scales	93 Cliff.
Cliff, Righter & Co., Mfrs. Car Springs	140 Nassau.
Coggswell, Mortimer C., Millwright	64 Broadway.
Consolidated Safety Valve Co.	11 Liberty.
Cooney Daniel F., Mfr. Sheet Iron	88 Washington.
Coxford, W. F., Mfr. Fire Arms	41 Centre.
Decruux, Chas., Mfr. Screws	95 Elizabeth.
Dewar, A., Mfr. Steel Dies	43 Duane.
Dreyfus, Bernard, Metal Perforator	79 Duane.
Eagle Tube Co.	622 W. 24th.
Ebel, Chas., Millwright	90 Crosby.
Gaskell, W. & Son, Mfrs. Bolts	433 E. 25th.
Gesswein, F. W., Mfr. Files	39 John.
Gilbert & Barker Mfg. Co.	Mfrs. Gas Machines, 75 Maiden Lane.
Groom, Levi J., Mfr. Scales	1014 3rd Av.
Hall's, Saml., Son, Mfr. Screws	229 W. 10th.
Hardie, Thos. W., Millwright	404 E. 55th.
Harvey Mfg. Co., Mfrs. Bolts	58 Astor House.
Hawkins, W. S., Mfr. Tools	135 Lewis.
Hayden, Gen. Son, Mfr. Fire Arms	151 Fulton.
Henry, E., & Bonnard	Bronze Founders, 237 Mercer.
Hitt, Hy, Zinc Founder	270 Av. P.
Hoffman, Joseph Mfr. Screws	8 Stanton.
Hubbel Screw Co., Mfrs. Screws	4 Fletcher.



**NEW YORK CITY—Continued.**

Hungerford, Geo. W. & Son, Millwrights, 824 5th.  
 Interchangeable Tool Co., ..... 81 Centre.  
 Kearney & Foot, Mfrs. Files, ..... 101 Chambers.  
 Knapp, John H., Mfr. Brass Tubing, ..... 17 John.  
 Litters, Alexander, Mfr. Files, ..... 224 E. 81st.  
 Lukanitsch, Michael, Mfr. Files, ..... 531 Broome.  
 Lurch, David, Mfr. Fire Arms, ..... 157 Grand.  
 Lyon, E. & Co., Hydraulic Jack, ..... 470 Grand.  
 McCullough, Richard, Mfr. Tools, ..... 632 1st Av.  
 McFarlanes', A. Son, Mfr. Fire Arms, 75 University  
 Place.

Mead, Isaac V., Mfr. Tools, ..... 370 Av. A.  
 Merwin, Hulbert & Co., Fire Arms, ..... 83 Chambers.  
 Moore, Henry, Mfr. Files, ..... 30 Gold.  
 Mott, Wm., Mfr. Screws, ..... 258 W. 28th.  
 Muller's, Nicholas, Sons, Bronze Founders, ..... 117  
 Chambers.

Newell Universal Mill Co., Millwrts, 34 Cortlandt.  
 Overbaugh, C. E. & Co., Mfrs. Fire Arms, ..... 267  
 Broadway.

Page, Thomas, Millwright, ..... 369 W. 11th.  
 Parsons, H. A., Mfr. Steam Blowers, ..... 95 Liberty.  
 Power, Maurice J., Bronze Founder, 5 Beekman.  
 Prentiss Vise Co., Mfrs. Vises, ..... 23 Dey.  
 Pulcometer Steam Pump Co., ..... 83 John.  
 Reilly, Edward, Mfr. Files, ..... 59 Ann.  
 Rieder, G. & J. Haug, Mfrs. Files, ..... 182 2nd.  
 Roach, John & Son, Iron Ship Builders, 814 E. 9th.  
 Robidoux & Son, Mfrs. Scales, ..... 102 John.  
 Roebbling's, John A., Son's Co., Mfrs. Wire Rope,  
 117 Liberty.

Salamander Grate Bar Co., ..... 110 Liberty.  
 Schmidt, F., Millwright, ..... 185 Rivington.  
 Schoenberg Metal Mfg. Co., ..... 530 E. 20th.  
 See, A. & Son, Mfrs. Shovels, etc., 1366 Broadway.  
 Spruce, Chas. & Co., Mfrs. Files, ..... 76 Reade.  
 Sutton, W. A., Mfr. Skates, ..... 524 W. 20th.  
 Thomas & Co., Mfrs. Tools, ..... 558 W. 34th.  
 Thompson, James R. & Co., Mfrs. Steel, ..... 93 John.  
 Uhler & Benton, Mfrs. Tools, ..... 36 John.  
 Union Nut Co., Mfrs. Nuts & Bolts, ..... 99 Chambers.  
 Worthington, H. R., Hydraulic Works, 239 Broad-  
 way.

**NIAGARA FALLS.**

Burdick, A. P., ..... Millwright.  
 Burdick, F. W. & F. M., ..... Machinists.  
 Niagara Falls Hydraulic Power Mfg. Co.,  
 Philpot & Leuppie, ..... Machinists.  
 Ware, Henry S., ..... Plumber.

**NIVERVILLE.**

Victor Mower Co.

**NORFOLK.**

Kennon, Henry, ..... Machinist.

**NORTH BLOOMFIELD.**

Davis, W. P., ..... Iron Founder.  
 Fairchild, C. H., ..... Millwright.

**NORTH GRANVILLE.**

Hall, George, ..... Mfr. Agl. Impts.  
 Ingalls, M. H., ..... Machinist.

**NORTH GREECE.**

Garrett & Son, ..... Mfrs. Agl. Impts.  
 Irwin, F. H., ..... Mfr. Agl. Impts.

**NORTH HARPERSFIELD.**

Groat, James, ..... Iron Founder.

**NORTH LANSING.**

Adriance Platt & Co., ..... Mfrs. Agl. Impts.  
 Miller, C. E. & A., ..... Mfrs. Agl. Impts.

**NORTH TARRYTOWN.**

Brombacher, Chas., ..... Mfr. Tools.

**NORTHVILLE.**

Latcher, Jacob, ..... Machinist.  
 Satterlee, Norman, ..... Iron Founder.

**NORWAY.**

Gage, L. D., ..... Mfr. Agl. Impts.

**NORWICH.**

Hayes & Rider, ..... Plumbers.  
 McDonald, D., ..... Plumber.  
 Mack, Richard, ..... Plumber.  
 Maydole, David & Co., ..... Mfrs. Hammers.  
 Thompson, D. M., Mfr. Agl. Impts. & Iron Founder.

**NORWOOD.**

Davis, H. M., ..... Machinist.

**NUNDA.**

Crosier, O. L., ..... Mfr. Agl. Impts.  
 Miller, Wm., ..... Machinist.  
 Woodworth, C. R., ..... Mfr. Cutlery.  
 Woodworth, Jas. R., ..... Machinist.

**NYACK.**

Gardner, M. R., ..... Plumber.  
 Magee, Thomas, ..... Boiler Maker.  
 Parkinson, Alonzo, ..... Plumber.  
 Rembe & Springsteel, ..... Plumbers.

**OAKFIELD.**

Fishell, Henry J., ..... Iron Founder.

**OAK HILL.**

Cheritree Bros., ..... Iron Founders.  
 Oak Hill Mfg. Co., ..... Iron Founders.

**OAKLAND.**

Crosier, O. L. & Co., ..... Iron Founders.

**ODESSA.**

Daniels & Co., ..... Mfrs. Plows.

**OGDENSBURG.**

Alden, W. C., ..... Iron Founder.  
 Allen, Albert, ..... Plumber.  
 Allen, W. B. & Co., ..... Iron Founders.  
 Curtis, Gates, ..... Iron Founder.  
 Doyle, Peter H., ..... Plumber.  
 Glass, John, ..... Machinist.  
 Havens, David W., ..... Plumber & Gas Fitter.  
 Lavier, Charles, ..... Plumber.  
 Marceau, C., ..... Boiler Maker.  
 Quigley, W. G., ..... Plumber.  
 Ricelton, R. R., ..... Millwright.

**OLD CHATHAM.**

Hulbert, Geo. A., ..... Iron Founder.

**OLEAN.**

Abbott, D. S., ..... Machinist.  
 Alexander, John W., ..... Machinery.  
 Chamberlin, Mfg. Co., ..... Machinists.  
 Gibbs & Sterrett Mfg. Co., ..... Machinists.  
 Ihrbacker, Davis & Co., ..... Plumbers, Steam & Gas  
 Fitters.  
 Luther, J. H., ..... Machinist.  
 Luther & Tafel, ..... Iron Works.  
 Myrick, Bros. & Co., ..... Iron Founders.  
 Simpson, W. H. & Co., ..... Plumbers.

**OMAR.**

Stackhouse, T. R., ..... Millwright.

**ONEIDA.**

Oneida Iron Works, ..... Engine Builders.  
 Oneida Steam Engine & Foundry Co.,  
 Sargeant, C. L., ..... Plumber.

**ONEONTA.**

Potter, W. M. & Co., ..... Machinists.  
 Stewart, C. C., ..... Iron Founder.  
 Vanderburgh A. & Son, ..... Iron Founders.

**ONONDAGA VALLEY.**

Chaffé, E. M., ..... Mfr. Agl. Impts.

**ONTARIO.**

Furnaceville Iron Co.....Mfrs. Iron.  
Parnell, Geo. & Son.....Mfrs. Plows.

**ORAMEL.**

Dodge, M. L. & Son.....Iron Founders.  
Stephen, Geo. W.....Iron Founder.

**ORISKANY.**

Oriskany Malleable Iron Co.

**ORISKANY FALLS.**

Ballard & Griggs.....Machinists.  
Hoyd, C. B.....Machinist.

**ORLEANS FOUR CORNERS.**

Ford, Eugene.....Machinist.  
King, J. D.....Mfr. Agl. Impts.

**OSWEGO.**

Ames Iron Works.....Iron Founders.  
Blair & McGrath.....Gas Fitters.  
Cliff, Righter & Co.....Mfrs. Car Springs.  
Converse, Eugene.....Mfr. Iron Fence.  
Duakhurst & Co.....Shipsmiths.  
Fayette, C. B.....Plumber.  
Findley, Thos.....Machinist.  
Haselton, G. H.....Rome, Watertown & Ogdensburg R. R.  
Keefe Bros.....Plumbers & Gas Fitters.  
Kernan, J.....Plumber.  
Kingsford, Thomas.....Founder & Machinist.  
McCracken, Patrick.....Shipsmith.  
Morse, W.....Millwright.  
Pearson, Thos.....Mfr. Saws.  
Sculley, E.....Plumber.  
Shead, C. G. & Co.....Plumbers.  
Sullivan, J. C.....Plumber.  
Thompson, A.....Machinist.  
Vulcan Iron Works Co.....Boiler Makers.  
Walpole, R. Jr.....Plumber.

**OSWEGO FALLS.**

Atwood, John & Son.....Mfrs. Chains.

**OTTO.**

Dewey, Ralph & Son.....Iron Founders.

**OWEGO.**

Camp, H. H. & Co.....Iron Founders.  
Johnson, Gere & Truman.....Mfrs. Agl. Imts.  
Stanborough, Colwell & Spring-tein.....Iron Founders.  
Thompson, A. B.....Machinist.

**PAINTED POST.**

Weston, A. & Co.....Iron Founders.

**PALATINE BRIDGE.**

Johnston, A. W.....Iron Founder.

**PALMYRA.**

Allen, Jos.....Mfr. Scales.  
French, Geo. W.....Plumber.  
Globe Mfg. Co.....Mfrs. Printing Presses.  
Johnson & Williams.....Mfrs. Drills.

**PARISHVILLE.**

Fletcher, Daniel.....Iron Founder.  
Tischnor, David B.....Machinist.

**PATCHOGUE.**

Baker, Chas. W.....Shipsmith.

**PEARSALLS.**

Mount, M. L.....Machinist.  
Sherman, Geo., & Bro.....Machinists.

**PEEKSKILL.**

Anderson Bros.....Machinists.  
Baxter, I. J.....Iron Founder.  
Buchanan, Thos.....Plumber.  
Champlin, D. E.....Plumber.  
Ely & Ramsey.....Stove Founders.  
Gaylord, W. T., Jr.....Plumber.  
Montross & Lent.....Stove Founders.  
National Stove Co.....Stove Founders.  
Peekskill Mfg. Co.....Machinists.  
People's Stove Works.  
Southard, Robertson & Co.....Stove Founders.  
Sutton, James T.....Plumber.  
Union Stove Works.....Stove Founders.

**PENFIELD.**

McGowan, John.....Iron Founder.

**PENN YAN.**

Cable, Daniel.....Millwright.  
Commercial Iron Works Co.....Iron Founders.  
Farmer Bros.....Mfrs. Bolts, Nuts, &c.  
Farmer Mfg. Co.....Mfrs. Nails.  
Mastin, C. C. & Son.....Gas Fitters.

**PEORIA.**

Fiero, Jno. M.....Mfr. Agl. Impts.

**PERRY.**

Olin, G. B. & Co.....Mfrs. Agl. Impts.  
Royce Reaper Co.  
Wyckoff, Tuttle & Olin.....Iron Founders.

**PETERSBURGH.**

Hakes, Porter.....Machinist.

**PETROLIA.**

Hunt, William.....Machinists' Supplies.

**PHELPS.**

Babcock, J. K.....Machinist.  
Thompson, P. & Co.....Iron Founders.

**PHILMONT.**

Fowler, George.....Machinist.  
Harder, W. G.....Machinist.  
Herrick & Elsworth.....Machinists.

**PHOENIX.**

Central City Knife Co.  
Lewis, H. D.....Machinist.  
Payne, John B.....Machinist.  
Russ & Dougall.....Iron Founders.

**PIKE.**

Ryder, C. B.....Machinist.  
Stebbins, Carlos.....Machinist.

**PINE BUSH.**

Smith, E. M.....Machinist.

**PINE LAKE.**

Ballon, L.....Machinist.

**PINE PLAINS.**

Bryan, Amos.....Mfr. Agl. Impts.

**PITCHER.**

Sanford, De Forrest.....Mfr. Edge Tools.

**PLATTSBURG.**

Hartwell & Myers.....Stove Founders.  
Marshall, Nathaniel.....Machinist.  
Moers, W. B. & Co.....Plumbers.  
Naylor & Co.....Mfrs. Iron.  
Nichols & Hull.....Mfrs. Iron.  
Percy, W. A.....Plumber.  
Saranac Horse Nail Co.  
Webb, Geo. N.....Plumber.  
Whitney, S. E.....Mfr. Saws.  
Williams, Andrew.....Mfr. Iron.

**PLEASANT BROOK.**

Thompson, L. P. &amp; Co.....Mfrs. Agl. Impts.

**POLAND.**

Trask, Isaac.....Mfr. Edge Tools.

**PONTIAC.**

Ryther, C. W.....Millwright.

**PORT BYRON.**

Lewis, O. V.....Mfr. Agl. Impts.

Schotts, Geo.....Iron Founder.

**PORT CHESTER.**

Abendroth, Bros.....Iron Founders.

Bent, S. S. &amp; Son.....Iron Founders.

Drumgold, John.....Mfr. Hardware.

Madden, M. H.....Plumber.

Russell, Burdall &amp; Ward.....Mfrs. Screws.

Wilcox, Josiah &amp; Co.....Mfrs. Tools.

**PORT CRANE.**

English, Henry.....Machinist.

**PORT DICKINSON.**

Stowe, Edward B.....Shaft Works.

**PORT HENRY.**

Bay State Iron Co.....Mfrs. Iron.

Cedar Point Iron Co.....Mfrs. Iron.

Tromblee, Andrew.....Iron Founder.

Witherbee, Sherman &amp; Co.....Iron, &amp;c.

**PORT JACKSON.**

Gilland, Francis &amp; Son.....Millwrights.

Perkins, Mrs. W. O.....Iron Founder.

**PORT JEFFERSON.**

De Veries, Henry.....Shipsmith.

Hart, E. &amp; Son.....Shipsmiths.

Ramsell, Richard.....Shipsmith.

**PORT JERVIS.**

Outwin, E.....Mfr. Knives.

St. John, Chas.....Founder and Machinist.

Stewart, W. D.....Machinist.

Swinton, Shimer &amp; Co.....Iron Founders.

**PORTLANDVILLE.**

Mumford, A. Coopert'n &amp; Susquehanna Valley R.R.

**POTSDAM.**

Bailey, D. A. B.....Plumber.

Chapman, N. C.....Millwright.

Holmes, Chas. R.....Millwright.

Hughes, Matthew.....Machinist.

Leete, C. W.....Iron Founder.

**POTTERSVILLE.**

Griswold, Geo. W.....Machinist.

**POUGHKEEPSIE.****PLUMBERS, STEAM AND GAS FITTERS.**

Baxter, T. D.....Mitchell &amp; Seymour.

Budd, Samuel T.....Moseley, Clarence.

Buys, Chas.....Mulrain, James.

Chatterton, J. W.....Osborne, L. I.

Cook, Bros.....Shurter &amp; Briggs.

Doughton, Bros.....Ward, Patrick H.

Heugstebeck, H. L.....Waters, Chas.

**MISCELLANEOUS.**

Adrianse, Platt &amp; Co.....Mfrs. Agl. Impts.

Albertson, B.....Mfr. Edge Tools.

Bernard, Bros.....Gas Fixtures.

Bentell, M. L.....Machinist.

Bullard &amp; Hitchcock.....Iron Founders.

Campbell, T. B.....Machinist.

**POUGHKEEPSIE—Continued.**

Collier, Isaac H.....Iron Founder.

Dudley &amp; Co.....Iron Founders.

Ellsworth &amp; Dudley.....Iron and Steel.

Esser, W. G.....Galvanized Iron.

Falkill Iron Co.....Mfrs. Iron.

Frazier, G. W.....Mfr. Files.

Grobe, F. H.....Mfr. Tools.

Macneill, John F.....Mfr. Tools.

Millard &amp; Gaylor.....Machinists.

Poughkeepsie Iron and Steel Co.

Poughkeepsie Iron Works.

Purdy, C. R.....Machinist.

Robin-on Machine Works.

Sedgwick &amp; Stuart Mfg. Co.....Mfrs. Iron.

Sterling &amp; Platts.....Mfr. Tools.

Stibbs, Henry.....Mfr. Tools.

Trowbridge &amp; Adrianse.....Plumbers' Supplies.

Whitney Spring Co.....Mfrs. Springs.

**PRATTSVILLE.**

Ferguson, D. W.....Millwright.

**PRESTON HOLLOW.**

Morrison, Wm.....Iron Founder.

**PULASKI.**

Fisher &amp; Ling.....Founders and Machinists.

**PULTNEYVILLE.**

Case, W.....Iron Founder.

**RAMAPO.**

Ramapo Iron Works.

Ramapo Wheel and Foundry Co.

**RAYNERTOWN.**

Snyder, John G.....Mfr. Springs.

**RED CREEK.**

Campbell &amp; Bennett.....Machinists.

**REDFORD.**

Justin, Signor &amp; Co.....Iron, &amp;c.

Tremblay, Peter.....Mfr. Iron.

Williams, Andrew.....Iron, &amp;c.

**REEDSVILLE.**

Young, Elias.....Machinery.

**REMSEN.**

Ellis &amp; Murry.....Machinists and Founders.

**RENSSELAERVILLE.**

Felter, Henry.....Iron Founder.

**RHINEBECK.**

Asher, J. H. &amp; Co.....Iron Founders.

**RICHBURGH.**

Davis, S.....Machinist.

Ligo, S. H. &amp; Son.....Machinists.

Phillips, Chas.....Machinist.

Williamson, Bros.....Machinists.

**RICHFIELD.**

Lockwood, Wm.....Iron Founder.

**RICHFIELD SPRINGS.**

Cole, S. F.....Plumber.

Risley &amp; Roberts.....Machinists.

**RICHMONDVILLE.**

Boom, A. L.....Machinist.

Stevens &amp; Wood.....Iron Founders.

**RIFTON GLEN.**

Kay, Geo. & Sons.....Mfrs. Cutlery.

**ROCHESTER.****IRON FOUNDERS.**

Co-operative Foundry Co

Galusha, N. H. Rochester Stove Co.  
Jones, J. Emory. Shorer & Taillie.  
Little & Rowe. Sill Stove Works.  
Long & Waugh. Somerville, Verian &  
Palmer, Thos. G. Schwab.

**MACHINISTS.**

Barnard & Hanna. Miller, Christian.  
Bernhard, Geo. Otes, M. S. & M. E.  
Brettell, Geo. E. Randall, Robert B.  
Clement, F. H. Redmond, Owen.  
Clifford, Thomas. Rochester Machine  
Connell & Dengler. Screw Co.  
Dorsey, James. Rochester Machinery  
Elithorpe, S. B. Mfg. Co.  
Emrich, E. Sander, L.  
Erdle, F. Schaffer, Jacob C.  
Gill, Calvin B. Siebert, Frank.  
Glea-on, Wm. Sintzenich, E. B.  
Graham, Jas. S., & Co. Smith, F. R.  
Graves, L. S., & Son. Teal, Wm.  
Greenwood, Jno. & Co. Tompkins, C. R., & Co.  
Hand, E. Townsend & Bach.  
Kingsbury, Gilbert J. Ulsht & Linn.  
Kohlmetz, Henry & Son. Vasker, Henry.  
Mayle, E. C. Walder, Amos.  
Michel, F. P. Widdowson, H., & Co.  
Michel, Geo. J.

**PLUMBERS, STEAM AND GAS FITTERS.**

Abercrombie, A. Foster & Hennegan.  
Backus, Edward. Fox, J. F.  
Barr & Creelman. Gauhn & Bassett  
Beach, J. S. Gommenginger, B.  
Bemis, H. A., & Co. Heinzl & Kelly.  
Bemis & Rogers. Hetzel, C. F.  
Bennett, R. Howe & Snyder.  
Blakeley, Joseph. King, F. L.  
Blakeley & Cary. Klein, Frederick.  
Boyd, Robert. Paulus, Jacob.  
Cameron, W. P. Reid, W. G.  
Carey, Arthur F. Sherlock & Sloan.  
Casebeer, Adolph. Spencer, Stalker &  
Connolly, Geo. W. Dumond.  
Cowles, Dwight B. Stepany, Chas. J.  
Eureka Steam Heating Walsh, John.  
Co. Westcott, W.  
Ford & Madden.

**MISCELLANEOUS.**

Alden & Lassig.....Mfrs. Iron Bridges.  
Bach, Geo.....Mfr. Shoemaker's Tools & Machinery.  
Bettys & Bullard.....Mfrs. Files.  
Briggs, M., & Son.....Mfrs. Safes.  
Bueg, John.....Mfr. Cutlery.  
Burke, W. B.....Iron & Steel.  
Carter, Giles & Co.....Mfrs. Agrl. Impl'ts.  
Charlotte Iron Works.....Mfrs. Iron.  
Chase, James.....Mfr. Lathes.  
Colman, J. B.....Brass Founder.  
Costain & Champion.....Millwrights.  
Cowles, John C.....Brass Founder.  
Cowles, Jos.....Millwright.  
Crane, Thomas.....Pattern & Model Maker.  
Duerr, Chas. F.....Boiler Maker.  
English Bros.....Mfrs. Scales.  
Ernst, Louis, & Son.....Mfrs. Tools.  
Excelsior File Works.  
Farquharson, D. S.....Millwright.  
Finzer & Zarges.....Millwrights.  
Flint, Joseph.....Mfr. Saws.  
Forbes & Plennet.....Sheet Iron Works.  
Furnaceville Iron Co.....Mfrs. Iron.  
Gee & Kelly.....Mfrs. Locks.  
Groggin & Knowles.....Galvanized Iron Works.  
Gordon & De Garmo.....Mfrs. Agrl. Impl'ts.  
Gregg, M., & Son.....Mfrs. Edge Tools.  
Hall, C. S.....Mfr. Agrl. Impl'ts.  
Handel & Co.....Galvanized Iron Works.

**ROCHESTER—Continued.**

Hemingway & Munn.....Mfrs. Hardware.  
Hoovey, J. P.....Rochester & Pittsburg R. R.  
Horton, Charles T.....Mfr. Edge Tools.  
Howe, H. J., & Co.....Mfrs. Scales.  
Irwin, J. S., & Co.....Mfrs. Files.  
Judson, Junius & Son.....Mfrs. Steam Governors.  
Keenan, John.....Millwright.  
Kelley, Peter.....Boiler Maker.  
Klein, E. G.....Pattern & Model Maker.  
Ladwig, C.....Mfr. Files.  
Langdon & Lochte.....Gas Fixtures, &c.  
Lee, E. S., & Co.....Mfrs. Tools.  
Lockey, Edward.....Mfr. Plows.  
Lutes, John.....Millwright.  
Mack & Co.....Mfrs. Edge Tools.  
Manley, Wm.....Mfr. Tools.  
Millington, S. A., & Son.....Coppersmiths.  
Mills & Graham.....Mfr. Iron Fence.  
Oliver, Geo.....Mfr. Agrl. Impl'ts.  
Ordway, W. W.....Millwright.  
Rippin, Joseph.....Mfr. Iron Shutters.  
Roby, S. B., & Co.....Iron, &c.  
Rochester Car Wheel Works.  
Rochester Pipe Tong Mfg. Co.  
Rochester Scale Works.  
Rochester Turbine Water Wheel Mfg. Co.  
Sargent & Greenleaf.....Mfrs. Locks.  
Sauer, A. F.....Mfr. Cutlery.  
Shipman, A. H.....Mfr. Scroll Saws.  
Siddons, Jno., & Co.....Galvanized Iron Works.  
Sintzenich, E. B.....Boiler Maker.  
Sloan, Samuel.....Gas Fixtures.  
Snow, John.....Mfr. Iron Railings.  
Sprague Novelty Works.....Mfrs. Hardware.  
Steam Gauge & Lantern Co.  
Stott Bros. & Co.....Mfrs. Files.  
Stott, George F.....Mfr. Files.  
Thomas, Benjamin F.....Coppersmith.  
Trayer, William.....Mfr. Safes.  
Warner, H. H.....Mfr. Safes.  
Warrant & Southworth.....Coppersmiths.  
Wiseman, A.....Mfr. Tools.  
Woodbury, Booth & Pryor.....Mfrs. Steam Engines.  
Wray, Henry, & Son.....Brass Founders.  
Zeigler, Louis, & Co.....Mfrs. Augers.

**ROGERSFIELD.**

Hall, E.....Chateaugay R. R.

**ROME.**

Adams, S., & Son.....Founders & Machinists.  
Aland, S., & Co.....Iron Founders.  
Banks, F.....Plumber.  
Buell, Merriam, Capron & Co.....Malleable Iron Wks.  
Cottam, Joseph S.....Plumber.  
Doyle Bros.....Machinists.  
New York Locomotive Works.  
Pell, H. W.....Mfr. Springs.  
Rome Iron Works.....Founders.  
Rome Merchant Iron Mill.....Rolling Mill.  
Russ, George P.....Plumber.  
Thayer, Charles.....Machinist.

**RONDOUT.**

Crosby, Sahler & Co.....Mfrs. Iron.  
Halloran, J. F.....Plumber.  
Hasbrouck, A. J., Jr.....Mfr. Iron.  
McEntee & Dillon.....Iron Founders.  
Murphy, James.....Sheet Iron, &c.  
Wright, Geo. W.....Ulster & Delaware R. R.

**ROSENDALE.**

Atkinson, A.....Machinist.

**ROSLYN.**

Burrows, Robert.....Plumber

**ROSSIE.**

Rossie Iron Works.

**ROXBURY.**

Gilbert, L.....Iron Founder.  
Hubble, P. F.....Machinist.

**RUSH.**

Congdon, J. S.....Machinist.  
Kinney, Samuel H.....Machinist.

**RUSHFORD.**

McDonald, C.....Mfr. Edge Tools.  
White, I. A.....Machinist.

**RUSHVILLE.**

Reddout, W. N.....Iron Founder.

**RUSSELL.**

Maine, I. A.....Machinist.  
Van Ornum, C. L.....Machinist.

**RYE.**

Halstead, A. M.....Machinery.

**SACKETT'S HARBOR.**

McKee, David.....Iron Founder.

**SALAMANCA.**

Casper & Steimal.....Plumbers.

**SAG HARBOR.**

Sherman, W. F.....Plumber.

**ST. JOHNSVILLE.**

Howe, John.....Machinist.  
Williams, M.....Mfr. Threshing Machines.

**SALISBURY CENTRE.**

Byington, G. L.....Machinist.

**SANBORN.**

Nafus & Hathway.....Iron Founders.

**SANDY CREEK.**

Stevens, Hiram M.....Iron Founder.

**SANDY HILL.**

Cornell, Jonathan.....Machinist.  
De Grushe, E.....Mfr. Edge Tools.  
Holbrook, Lyman.....Iron Founder.  
Holbrook, N. W.....Machinist.  
McCarthy & Co.....Founders & Machinists.  
Sandy Hill Iron and Brass Works.  
Wait, P. H.....Machinery.  
Wells & Van Wormer.....Machinists.

**SARANAC.**

Bowen & Signor.....Mfrs. Iron.  
Mead, E.....Machinist.  
Parsons, Wales.....Mfr. Edge Tools.

**SARATOGA SPRINGS.**

Ames, Frank C.....Plumber.  
Cook, Eli R.....Machinist.  
Downing, George T.....Plumber.  
Gilman, Joseph.....Founder.  
Hefferman, Peter.....Plumber.  
Shevelin & Baker.....Machinists.  
Shevelin & Matthews.....Plumbers.  
Shultis & Co.....Machinists.  
Trim & Tarrant.....Plumbers & Steam Fitters.

**SAUGERTIES.**

Cannon, Peter & Co.....Iron Founders.  
Montrose, R. & Son.....Millwrights.  
Tuckerman, Mulligan & Co.....Rolling Mills.  
Van Hoesen, W. S.....Mfr. Cutlery.

**SAUQUOIT.**

Pope, T. J.....Mfr. Knives.

**SAVANNAH.**

Hall, Andrew S.....Machinery.

**SCHENECTADY.**

Angold, John.....Plumber.  
Cantine, J. & Co.....Iron Founders.  
Case, Levi.....Copp. Smith.  
Clute Bros. & Co.....Iron Founders.  
Conde, A. B. & Co.....Mfrs. Springs.  
Daken, John H.....Plumber.  
Edwards, John A.....Gas Fitter.  
Helm, Frank F.....Gas Fitter.  
Jackson & Sands.....Machinists.  
Jones Car Mfg. Co.....  
Klemm, Abram.....Mfr. Files.  
McQueen Locomotive Works.  
Parker, Thomas S.....Machinist.  
Schenectady Locomotive Works.  
Schenectady Spring Works.  
Schenectady Stove Co.....Stove Founders.  
Smith, W. H.....Plumber.  
Smith & Stevenson.....Plumber.  
Stevens, Howard.....Plumber.  
Stevenson & Bros.....Plumbers.  
Van Patten, F. T.....Machinist.  
Westinghouse, G. & Co.....Mfrs. Agrl. Impls.  
Whiteler, Fassler & Kelly.....Mfrs. Mowers, &c.

**SCHENEVUS.**

Markham, James.....Iron Founder.

**SCHROON RIVER.**

Clark & True.....Iron Founders.

**SCHUYLERVILLE.**

Craw & Dennis.....Iron Founders.

**SCOTTSBURGH.**

Traxler, Franklin.....Machinist.

**SCOTTSVILLE.**

Slocum, Geo. E.....Iron Founder.

**SENECA FALLS.**

Binney, W. W.....Gas Fitter.  
Cheney, F.....Mfr. Scales.  
Cowing & Gleason Mfg. Co.....Mfrs. Pumps, Fire Engines, etc.  
Fitch, John.....Millwright.  
Gould's Mfg. Co.....Bell Founders.  
Kavanaugh, D.....Plumber.  
McGarvey, J. W.....Machinist.  
Peterman & Smith.....Mfrs. Files.  
Rumsey & Co.....Mfrs. Pumps & Fire Engines.  
Seneca, Mfg. Co.....Castings, etc.  
Silsby Mfg. Co.....Mfrs. Fire Engines.  
Waters, F.....Sheet Iron, etc.  
Yeman, J. R.....Machinist.

**SETAUKET.**

Hawkins, Daniel.....Shipsmith.

**SHERBURNE.**

Crowell, Henry.....Machinist.  
Herriman, Albert.....Iron Founder.

**SHORTSVILLE.**

Empire Grain Drill Co.  
Preston, G. H.....Mfr. Agr. Impts.  
Sheffer, C. H.....Iron Founder.

**SHUSHAN.**

Lovejoy, Hiram H.....Iron Founder.

**SILVER CREEK.**

Holcomb & Heine.....Mfrs. Mill Machinery.  
Howes, Babcock & Ewell.....Mfrs. Mill Machinery.

**SING SING.**

Blakslee, E. G. & Co.....Iron Founders.  
Clarke & Draper.....Mfrs. Files.  
Kipp, Abram, Jr.....Machinery.  
Kipp Engine Works.  
Spruce, Chas. & Co.....Mfrs. Files.  
Turner, Jonathan.....Mfr. Saws.

**SKANEATELES.**

Hall, C. F. & Son.....Mfrs. Steam Valves.  
 Sherwood, Asa L.....Iron Founder.

**SLOATSBURG.**

Sterling Iron & Railway Co.....Mfrs. Iron.

**SMITHTOWN.**

Kissam & Eddy.....Iron Founders.

**SMITHTOWN BRANCH.**

Redwood, Jas.....Plumber.

**SMITHVILLE FLATS.**

Lewis & Davis.....Sheet Iron, etc.

**SODUS.**

Hamm, A. P.....Iron Founder.

**SODUS-CENTRE.**

Metz, Fred.....Iron Founder.

**SODUS POINT.**

Derby, M. C.....Machinist.

**SOUTHAMPTON.**

Dunster, Richard.....Machinist.

**SOUTH CAMERON.**

Monaghan, James.....Millwright.

**SOUTH DANVILLE.**

Proctor, Henry.....Mfr. Knives.

**SPRING VALLEY.**

Downs, W. E.....Mfr. Files.  
 Slinn & Shafer.....Mfrs. Files.

**SPRINGVILLE.**

Shuttleworth, C. J.....Iron Founder.  
 Shuttleworth & Morse.....Machinists.

**SPRINGWATER.**

Kellogg, N. A.....Mfr. Scythes.  
 Peskins Bros.....Machinists.  
 Rogers, H. M.....Mfr. Plows.

**STAATSBURGH.**

Bordenstein, J. G. & Bro.....Mfrs. Edge Tools.

**STANARDS CORNER.**

Hulett, W. A.....Machinist.

**STAPLETON.**

Alexander, Chas. W.....Plumber.  
 Brick, Samuel R.....Gas Fixtures.  
 Gaffney, Joseph H.....Plumber.  
 Larkin, Michael F.....Plumber.  
 Obertuffer, E. M.....Plumber.  
 Schluster, Henry.....Machinist.  
 Siddall Bros.....Mfrs. Saws.  
 Warth, A.....Machinist.

**STARKEY.**

Manier, John.....Machinist.

**STERLING.**

Tobedo, C.....Mfr. Edge Tools.

**STOCKPORT.**

Philip, Rossmann.....Machinist.  
 Reynold's, R. Son.....Machinist.

**STONE POINT.**

Wiles, A. M. & W. H.....Machinist.

**STRYKERSVILLE.**

Wooster, J.....Millwright.

**SUSPENSION BRIDGE.**

Lipp, Lewis.....Plumber & Gas Fitter.

**SYRACUSE.****IRON FOUNDERS.**

Alexander, Bradley & Phoenix Foundry & Machine Co.  
 Dunning.  
 Cashman & McCarthy. Pinkerton, Jacob.  
 Christman, John H. Porter Mfg. Co.  
 Draper, Geo. Powell, A. C. Son & Co.  
 Onondaga Iron Foundry. Senk, J. & Bro.  
 Smith & Warner.

**MACHINISTS.**

Dodge, Fred. Mosely, Jerome S.  
 Glazier & Raymond. Raymond, E. A.  
 Hennessey, Dennis. Raymond, Frank.  
 Hobert, Jonas G. Sanderson, W. J.  
 Leonard, H. W. Standen, Barber & Co.  
 Lipe, Chas. E. Tenbrock, F.  
 Malcolm, Wm. White, Hamilton.

**PLUMBERS, STEAM AND GAS FITTERS.**

Carroll, Francis E. Joy, Edward.  
 Carroll, James A. McClure, Robert C.  
 Clancy, Timothy. Murphy, James.  
 Friend, Geo. S. Pierce, Butler & Pierce.  
 Gillroy, P. J. Reid & Murphy.  
 Group, Frederick. Roney & Blair.  
 Hanchett, Chas. G. Tily, A.  
 Hennesey, M. H.

**MISCELLANEOUS.**

Birks, Geo. & Son.....Mfrs. Files.  
 Bradley & Co.....Mfrs. Agl. Impts.  
 Brower, H. C. & Son.....Brass Founders.  
 Bull, E.....Millwright.  
 Burns, Myron D.....Mfr. Screws.  
 Burns, W. B.....Malleable Castings.  
 Clark & Van Wye.....Mfrs. Vises.  
 Ellis, L. W.....Millwright.  
 Fairchild, A.....Millwright.  
 Gilcher, John.....Millwright.  
 Gilmore, D.....Boiler Maker.  
 Graves, Hiram.....Mfr. Elevators.  
 Lauvena, Adam.....Mfr. Tools.  
 Le Fever, D. M.....Mfr. Guns.  
 Livingston, Jos. W. & Co.....Mfrs. Guns.  
 McCarthy & Bedford.....Iron, &c.  
 Oberdorfer, M. L.....Brass Founder.  
 Paul, F. A.....Mfr. Cutlery.  
 Pearson, J. & T.....Mfrs. Cutlery.  
 Pease, John F. & Co.....Coppersmiths.  
 Penn & Lee.....Mfrs. Steel Springs.  
 Phelps, W. H.....Brass Founder.  
 Pierson, H. W.....Mfr. Saws.  
 Sanderson Bros. Steel Co.....Mfrs. Steel.  
 Smith, F. R.....Pattern & Model Maker.  
 Smith, L. C.....Mfr. Guns.  
 Spalding, Wm.....Mfr. Cutlery.  
 Stearns, E. C. & Co.....Mfrs. Hdw.  
 Straight Line Engine Co.....Mfrs. Engines.  
 Sweets Mfg. Co.....Steel Works.  
 Syracuse Bolt Co.  
 Syracuse Chilled Plow Co.  
 Syracuse File Works.  
 Syracuse Iron & Tube Co.  
 Syracuse Iron Works.....Mfrs. Iron.  
 Syracuse Screw Co.  
 Syracuse Twist Drill Co.  
 Thomson, Judson L.....Mfr. Hdw.  
 Walther, Lewis.....Mfr. Scales.  
 Watkeys, H.....New York Central and Hudson  
 River R. R.  
 West, Geo. W.....Syracuse, Chenango and New  
 York R. R.  
 Whitman & Barnes Mfg. Co.....Mfrs. Knives.

**TABERG.**

Barden, W. A.....Mfr. Edge Tools.

**TARRYTOWN.**

Cornell, B. F.....Mfr. Iron Railings.  
 Hamill, Mrs. S. J.....Plumber.

**TAYLOR.**

Tanner, H.....Machinist.

**THERESA.**

Wakefield, Ceylon &amp; Son..Founders &amp; Machinists.

**THROOPSVILLE.**

Schuyler, F.....Millwright.

**TICONDEROGA.**

Hawksley, Joseph.....Mfr. Files.  
 Hooper, Wm. & Co.....Founders & Machinists.  
 Horicon Iron Co.....Mfrs. Iron.  
 Porter, Truman.....Iron Founder.  
 Pratt & Co.....Iron Founders.

**TOMPKINSVILLE.**

Miles, J. J.....Plumber.  
 Fringle & Sons.....Plumbers.

**TONAWANDA.**

Adams Bros.....Mfrs. Saws.  
 Armitage, Herschel & Co..Founders & Machinists.  
 Niagara River Iron Co.....Mfrs. Iron.  
 Smith, Hubert.....Mfr. Agl. Impls.  
 Tonawanda Machine Co.  
 Van Brocklin, S. A.....Machinist.

**TRENTON.**

Parker, Jas. H.....Iron Founder.

**TROY.****IRON FOUNDERS.**

Burdett, Smith & Co.      Henderson, J. C.  
 Bussey, McLeod & Co.    His'op, Mrs. Elizabeth.  
 Church, H. S.            Hyde, James R.  
 Co-operative Stove Wks.    Mahoney, Michael.  
 Corse & Co.            Paris, Daniel E. & Co.  
 Fales, A. B.            Phillips, Geo. H. & Co.  
 Filley, Marcus L.        Potter & Co.  
 Fuller & Warren Co.     Standley & Son.  
 Giles Stove Co.         Starbuck, Geo. H.  
 Gould, J. & Co.         Stowe, F. H.  
 Graff & Co.            Sweet, Quimby & Perry.  
 Greene, C. O.            Victor Stove Co.  
 Harrison & Kellogg.     Wolfe Stove Co.

**MACHINISTS.**

Aird, Andrew.            Knowlson & Kelley.  
 Brown, Silas H.         McCune, Wm.  
 Bunnell, L. S.          Mambert, Harrison.  
 Carr, W. H. & Co.        National Machine Co.  
 Coutie Wm. & Son.       Neemes, G. C. S.  
 Enler, Peter.            Richardson, F. W.  
 Hamilton, Wm.          Saxe, W. A.  
 Hart, Wm.               Sherwood, C. A.  
 Hemenway & Richard-    Tolhurst, W. H.  
   son.                    Tompkins Bros.

**PLUMBERS, STEAM & GAS FITTERS.**

Barnes, W. H.            Morris, Samuel.  
 Denison, Chas.         Mulligan & Schermer-  
 Dodds, Fergus.         horn.  
 Dwyer, C.               O'Brien, Timothy.  
 Ferguson, Wm.          Reid, Jno. A.  
 Fleming, Mrs. Annie C.    Smith, John E.  
 Fleming, Wm.            Thornton, James.  
 Maguire, Jos. P.         Willis, Charles.  
 Meredith, Joseph.

**MISCELLANEOUS.**

Albany & Rensselaer Iron & Steel Co.  
 Arnold, G. Walton.....Machinery.  
 Arnold, O. B.....Cotton & Woolen Machinery.  
 Brown, Albert.....Pattern & Model Maker.  
 Burden Iron Co.....Mfrs. Rivets.  
 Carr, J. B. & Co.....Mfrs. Chains.  
 Carter, E.....Mfr. Tools.  
 Chrystal, Walsh, & Moyles.....Iron Works.  
 Guett Mfg. Co.....Gas Fixtures.  
 Cridge, E. J.....Pattern & Model Maker.  
 Davis & Co.....Pattern & Model Makers.  
 Davis, Z. B. Troy & Boston R. R.  
 Essex Horse Nail Co.  
 Everingham & Hogg.....Boiler Makers.  
 Fox, R. G.....Mfr. Files.  
 Gignac, L. A.....Pattern & Model Maker.  
 Gilbert & Bush Co.....Car Builders.

**TROY—Continued.**

Grace, B.....Pattern & Model Maker.  
 Green's, Hannibal, Son & Co.....Iron.  
 Gurley, W. & L. E.....Brass Founders.  
 Hare, J. & Co.....Pattern & Model Makers.  
 Heartt, J. S. & Co.....Mfrs. Car Wheels.  
 Holland & Thompson.....Brass Founders.  
 Holzhauer, Louis.....Mfr. Hardware.  
 Howe & Co.....Iron.  
 Hoyt & Wynkoop.....Brass Works.  
 Jones & Co.....Brass Founders.  
 Keep, W. J.....Mfr. Ranges.  
 Kellogg, W. P.....Mfr. Hardware.  
 Kemp, Wm.....Brass Founder.  
 Kennedy & Vitalius.....Pattern & Model Makers.  
 Lane & Gale.....Mfrs. Axes.  
 Ludlow Valve Mfg. Co.  
 Lyman, James.....Coppersmith.  
 Marshall, Geo.....Boiler Maker.  
 Martin & Murphy.....Mfrs. Springs.  
 Meneely, Clinton H., Bell Co.....Founders.  
 Morrison, Colwell & Page.....Mfrs. Iron.  
 Pine, J. LeRoy.....Mfr. Files.  
 Starbuck Bros.....Engine Builders.  
 Sutherland, Thos. S. & Son.....Iron Works.  
 Sweet & Clark.....Mfrs. Hardware.  
 Teschan, Chas. L.....Coppersmith.  
 Torrance, Merriam & Co.....Malleable Iron.  
 Troy, Iron Railing Works.  
 Troy Malleable Iron Co.  
 Warren, J. M. & Co.....Iron, etc.  
 Whitney, B. S.....Coppersmith.

**TRUMANSBURG.**

Gregg & Co.....Mfrs. Agl. Impls.  
 Rumsey, Almy.....Iron Founder.

**TURIN.**

Rea, Robert.....Iron Founder.

**TYRE.**

Corry, Thomas.....Machinist.

**UNADILLA.**

Brewster Bros & Co.....Machinists.  
 Newton, M. & L. M.....Machinists.  
 Sewall, Wm. H.....Millwright.  
 Teller, R. R.....Machinist.

**UNION MILLS.**

Howe, W. C.....Mfr. Agl. Impl'ts.

**UNION SPRINGS.**

Spencer, J. O. &amp; Son...Mfrs. Threshing Machines.

**UTICA.****PLUMBERS STEAM AND GAS FITTERS.**

Cahill, Jno. J.            Martin, Edward.  
 Carroll, John.          Millar, Chas. & Son.  
 Cook, Jno. O.            Scott, Peter M.  
 Duffy, Chas. G.         Wicks, Hughes & Grif-  
 Garrigan, James.        fith.  
 Kavanagh, W. H.        Williams, R. P.

**MISCELLANEOUS.**

Alland, Geo.....Mfr. Files.  
 Allen, G. F. & Co.....Mfrs. Saws.  
 Bailey, Jno., Utica & Black River R. R.  
 Colby & Schreier.....Machinists.  
 Curtis, P. S.....Founder & Machinist.  
 Dagwell, John.....Iron Founder.  
 Dean, Lewis.....Mfr. Iron Railings.  
 Dent, Wm. & Son.....Founders and Machinists.  
 Eynon, John.....Mfr. Agl. Impls.  
 Foster, Thos. & Son.....Iron, &c.  
 Froeligh, C.....Mfr. Tools.  
 Guelich, O. E. C.....Mfr. Agl. Impls.  
 Hayden & Jones.....Machinists.  
 Hart, H. G. & Co.....Iron Founders.  
 Huntley & Babcock.....Mfrs. Agl. Impls.  
 Johnson & Co.....Mfrs. Gray Iron Castings.  
 Kamp, Geo.....Pattern and Model Maker.  
 Kavanagh, W. H.....Plumber.  
 Kirkland Iron Co.

**UTICA—Continued.**

Le Roy, Shattuck & Head.....Mfrs. Hardware.  
Lewi, Jos. & Bro.....Mfrs. Cutlery  
Mercer, W. E.....Model and Tool Maker.  
Moser, John.....Iron Worker.  
Munson, Bros.....Mill Machinery.  
Palmer, Chauncey & Son.....Iron Founders.  
Peckham, J. S. & M.....Stove Founders.  
Potter, Geo.....Brass Founder.  
Reed, Edward.....Mfr. Tools.  
Ross, R. M.....Machinist.  
Simpson, A.....Mfr. Saws.  
Utica Steam Gauge Co.....  
Wheeler, Russell, Son & Co.....Mfrs. Stoves.  
Wright, Dana & Co.....Iron, &c.  
Young, Q. M.....Machinist.

**VALLEY FALLS.**

Herrington, E. F.....Mfr. Mowing Machines.

**VAN HORNESVILLE.**

Tunncliffe, Joseph.....Iron Founder.

**VENICE CENTRE.**

Streeter, J. C.....Machinist.

**VICTOR.**

Comford, W. H. & Son.....Iron Founders.  
Ridley, A. G. & Co.....Iron Founders.

**WADDINGTON.**

Jardin, W. C.....Machinist.  
Mayatt, John.....Iron Founder.

**WALDEN.**

New York Knife Co.....Mfrs. Knives.  
Rider Engine Co.....  
Taylor, Bros.....Mfrs. Files.  
Walden Knife Co.....Mfrs. Knives.

**WALES.**

Harvey, S. D.....Millwright.

**WALTON.**

Flint, N. O.....Machinist.

**WAPPINGERS' FALLS.**

Armstrong, A. W.....Stove Founder.  
Hawkins, Albert.....Iron Founder.

**WARSAW.**

Agar, Bros.....Mfrs. Agl. Impts.  
Donahue, James.....Plumber.  
Everingham, E. B.....Machinist.  
Martin, L. A.....Machinist.  
Variety Machine Works.....Machinists.

**WARWICK.**

Mills, S.....Lehigh and Hudson River R. R.  
Parrott Iron Co.....Mfrs. Iron.  
Richardson, H. W.....Iron Founder.  
Wood, Jesse.....Millwright.

**WASHINGTON MILLS.**

Huntley & Babcock.....Mfrs. Agl. Impts.

**WASSAIC.**

Gridley, Noah & Son.....Mfrs. Iron.

**WATERFORD.**

Barnfather, D. G.....Gas Fitter.  
Barnfather, Frank B.....Gas Fitter.  
Brewster, Bros.....Gas Fitters.  
Brooks, Thos.....Mfr. Nuts.  
Button, L. & Son.....Mfrs. Fire Engines and Pumps.  
Gage, George.....Machinist.  
Holroyd & Co.....Mfrs. Dies, &c.  
Humphrey, Wm.....Mfr. Valves.  
King, J. M. & Co.....Mfrs. Dies, &c.  
Mohawk and Hudson Mfg Co.....Valves, &c.

**WATERLOO.**

Huff, A. W. & Isaac L.....Iron Works.  
Theobald, Andrew.....Iron Founder.  
Thomas, H. H.....Mfr. Agl. Impts.

**WATERPORT.**

Anderson, P. D.....Iron Founder.  
Spencer, A.....Mfr. Agl. Impts.

**WATERTOWN.**

Babcock, H. H. & Sons.....Mfrs. Springs.  
Bagley & Sewell Co. The.....Iron Founders.  
Barron, Baffrey & Co.....Plumbers.  
Bartlett, Samuel B. & Son.....Pattern and Tool  
Makers.  
Belknap & Lewis.....Iron, &c.  
Bragger, Joshua J. & Son.....Gas Fitters.  
Cook, Gustavus.....Millwright.  
Cook, H. D.....Millwright.  
Davis Sewing Machine Co.....  
Gates & Spratt.....Plumbers, &c.  
Gleason, A. L.....Millwright.  
Gotham, D. B.....Mfr. Files.  
Harbottle & Howard.....Plumbers.  
Harmons & Lee.....Mfrs. Plows.  
Hickey, P. H.....Brass Founder.  
Howard, A. & L. A.....Plumbers.  
King, J. M. & Co.....Machinists' Supplies.  
Lord, G.....Mfr. Agl. Impts.  
Mohawk & Hudson Mfg. Co.....Machinists.  
Peck, Phineas.....Plumber.  
Penn & Lee.....Mfrs. Springs.  
Phillip, A. J.....Plumber.  
Sampson & Roughsedge.....Mfrs. Files.  
Sargeant & Andrews.....Iron, etc.  
Watertown Steam Engine Co.....  
Wilson, J. C.....Ornamental Iron Works.

**WATER VALLEY.**

Hunt, E. A.....Mfr. Agl. Impts.

**WATERVILLE.**

Beardsley & Co.....Machinists.  
Berrill, J. A. & Sons.....Iron Founders.  
Norton, John L.....Mfr. Agl. Impts.

**WATKINS.**

Cooley, R. P.....Iron Founder.  
Frost, Chas. S.....Iron Founder.  
Rumsey, E. S.....Iron Founder.  
Schuyler Iron Works.....Mfrs. Agl. Impts.

**WAVERLY.**

Cayuta Wheel & Foundry Co.....  
Francis & McCulloch.....Machinists.  
Lemon, James.....Iron Founder.

**WAYNE.**

Mitchell & Raplee.....Mfrs. Agl. Impts.

**WEBSTER.**

Chapman & Odell.....Iron Founders.

**WELLS.**

Babcock, J. W.....Machinist.

**WEELSBURGH.**

Hatfield, M.....Machinist.

**WELLSVILLE.**

McEwen Bros.....Machinists.  
Sweet, L. & Co.....Mfrs. Agl. Impts.  
Tuller, E. B.....Iron, etc.  
Wolf, Grainger & Co.....Gas Fixtures.

**WEST ALBANY.**

Van Vorst, G. B., New York Central & Hudson  
River R. R.

**WEST CHAZY.**

McGrath, P. C.....Machinist.  
Wood, O. K. & Co.....Mfrs. Agl. Impts.  
Wright, Smith E.....Millwright.

**WESTCHESTER.**

Hurst, Wm.....Plumber.  
Tilley, John.....Coppersmith.



**WEST DAVENPORT.**

Evans, S. W. .... Mfr. Rakes.  
Morrell & Houghtaling..... Mfrs. Agl. Impts.

**WEST EDMESTON.**

Corbett, John..... Mfr. Agl. Impts.

**WESTFIELD.**

Dascomb, W. E. .... Millwright.  
McCloskey, S. A. .... Plumber.  
York, Geo. P. .... Mfr. Agl. Impts.

**WESTMORELAND.**

Westmoreland Malleable Iron Co.

**WEST NEW BRIGHTON.**

Blossom, P. A. .... Plumber.  
Clark & Morton..... Plumbers.  
Smith, E. .... Machinist.

**WEST ONEONTA.**

Culver, F. & J. H. .... Iron Founders.  
Straight, Burton..... Machinist.

**WEST STOCKHOLM.**

Bartlett & Smith..... Iron Founders.  
Smith, Carlton..... Mfr. Agl. Impts.

**WEST TROY.**

Armstrong, Chas. R. .... Plumber.  
Covert Mfg. Co. .... Mfrs. Hardware.  
Dickerman, Jas. E. .... Iron Founder.  
Holden, Hoffman & Co. .... Iron Founders.  
Keep, W. J. .... Iron Founder.  
McClure, W. G. .... Plumber.  
Olmstead, A. P. .... Plumber.  
Paris, D. E. & Co. .... Stove Founders.  
Roy & Co. .... Mfrs. Hardware.

**WEST WINFIELD.**

Kinney, Horace..... Machinist.  
Phillips, L. .... Mfr. Agl. Impts.

**WHITEHALL.**

Burleigh, H. G. & Bro..... Iron, etc.  
La Tour, J. .... Plumber.

**WHITE PLAINS.**

Jackman, Robert..... Plumber.

**WHITE STONE.**

Locke, J. D. .... Iron, etc.  
McKay, Donald..... Machinist.

**WHITESTOWN.**

Babbitt, B. T. .... Founder & Machinist.  
Stone, D. F. .... Millwright.  
Whitesboro Machine & Iron Works.

**WHITESVILLE.**

Allen, C. C. & Son..... Mfrs. Agl. Impts.  
Allen, E. R. & Co. .... Founders & Machinists.

**WHITNEY'S POINT.**

Longbothum, J. E. .... Machinist.

**WILLET.**

Grant, W. B. .... Mfr. Edge Tools.

**WILLIAMSVILLE.**

Oswold, John..... Iron Founder.

**WILLSBOROUGH.**

Ferris, Jno. .... Iron, etc.  
Noble, Belden..... Iron, etc.

**WILMINGTON.**

Weston, W. F. & S. H. .... Iron, etc.

**WILSON.**

Barnum, David L. .... Iron Founder.  
Fuller, H. A. .... Iron Founder.  
Tabor, B. D. .... Machinist.

**WINDHAM.**

Newberry, J. G. .... Machinist.

**WINDSOR.**

Smith, J. T. .... Iron Founder.

**WISCOY.**

Dodge, Horace & Co. .... Iron Founders.  
Dodge, Mills & Co. .... Mfrs. Agl. Impts.

**WOLCOTT.**

Knapp & Son..... Iron Founders.

**WOODHULL.**

Warner, J. S. .... Iron Founder.

**WOODSBURG.**

Conklin, J. J. .... Plumber.

**WOODS FALLS.**

Wood, W. W. & Co. .... Mfrs. Iron.

**WOODSTOCK.**

Brandon, John E. .... Plumber.

**WORTHVILLE.**

Harrington, Albert..... Mfr. Edge Tools.

**YONKERS.**

Beale & Walworth..... Iron Founders.  
Coffey, John J. .... Gas Fixtures.  
Costello, E. M. .... Plumber.  
Cunningham, Jno. J. .... Plumber.  
Doel, Thos. M. .... Iron Founder.  
Eickemeyer, Rudolph..... Machinist.  
Harper, Robert..... Plumber.  
Marrion, Thos. .... Plumber.  
Morris, Thos. .... Founder & Machinist.  
New York Plow Co. .... Mfrs. Plows.  
Osterheld & Eickemeyer..... Machinists.  
Otis Bros & Co. .... Machinists.  
Robinson, Thos. .... Boiler Maker.  
Rushford, James..... Pattern & Model Maker.  
Saunders, D. Sons..... Machinists.

**YORK.**

Heggar, Duncan..... Iron Founder.  
Russell & Wilson..... Mfrs. Hardware.

**YORKSHIRE.**

Schwab, H. H. .... Iron Founder.  
Snyder, G. M. .... Iron Founder.

**YORKSHIRE CENTRE.**

Smith, W. C. .... Machinist.

**YOUNGSTOWN.**

Ripson, Wm. & Son..... Iron Founders.

**NORTH CAROLINA.**

**ASHEVILLE.**

Girdwood & McLellan..... Machinists.

**BATTLEBORO.**

Hobgood & Bro..... Iron Founders.

**BETHANIA.**

Stoltz, P. A. .... Copper Smith.

**BLISS.**

Hiatt, M. .... Mfr. Iron.  
Hiatt, J. M., & W. A. .... Mfrs. Iron.

**CHARLOTTE.**

Beckett & McDowell..... Machinery.  
Brown, Noah..... Machinery.  
Liddel, W. J. F. & Co. .... Iron Works.  
Mecklenburg Iron Works.  
Morgan, W. C. .... Machinist.  
O'Donnell, D. .... Plumber.  
Talbot & Sons..... Machinists.

**COLUMBIA.**  
Holadia Bros.....Machinists.

**CONCORD.**  
Beatty, M. O.....Mfr. Plows.  
Freeman & Co.....Iron Founders.

**DUNCAN'S CREEK.**  
Packard, W. M.....Millwright.

**DURHAM.**  
Hanks, W. H.....Machinist.  
Mangum, W., & Son.....Machinists.

**DYMOND CITY.**  
Lordley, J. E.....Jamesville & Washington R. R.

**ELIZABETH CITY.**  
Weyworth, J. D.....Machinery.

**FAYETTEVILLE.**  
Clark, Isaac W.....Cape Fear & Yadkin Valley R. R.  
McMillan Bros.....Coppersmiths.  
Underwood, J. B.....Machinery.

**FRANKLINTON.**  
Morris & Williams.....Machinery.

**FRANKLINVILLE.**  
Burgess, John C.....Millwright.

**GARYSBURG.**  
Joyner, W. T.....Machinery.

**GOLDSBORO.**  
Collison, W. C.....Millwright.  
Hartsell, J. A.....Millwright.  
Kornegay, W. F., & Co.....Iron Founders.  
Talbot & Son.....Machinery.  
Tanner, W. E., & Co.....Mfrs. Engines, Boilers, &c.

**GRANGE.**  
Hamilton, Jos., & M. L.....Machinery.

**GREENSBORO.**  
Glasscock, Giles T.....Iron Founder & Machinist.  
Pomeroy & Lookabill.....Machinery.  
Sargeant Mfg. Co.....Mfrs. Agrl. Impls.

**HICKORY.**  
Fry, Jas. C.....Millwright.  
Ramsour, A. L.....Millwright.

**HIGH POINT.**  
Perry, S.....Iron.

**HILLSBOROUGH.**  
Berry, J.....Machinist.

**HOLMAN'S MILLS.**  
Stafford, Henley & Co.....Iron Fdrs & Machinists.

**IRON STATION.**  
Reinhart, J. F.....Iron.

**KERNERSVILLE.**  
Harmon, J. S.....Millwright.

**KING'S MOUNTAIN.**  
Kendrick Bros.....Machinists.

**KINSTON.**  
Kinston Machine Works.

**LEXINGTON.**  
Shemwell, Baxter & Co.....Iron Founders.  
Thompson's J. H. Sons.....Iron Founders.

**LINCOLNTON.**  
Stubbs, E. W., & Son.....Machinists.

**LOCKVILLE.**  
American Iron & Steel Co.  
Luke Bros.....Iron Founders.

**LOWELL.**  
Abernathy, J. W.....Millwright.  
Titman, A. B.....Millwright.

**MAGNOLIA.**  
Hartsell, J. M.....Machinist.

**MEBANESVILLE.**  
Tate, G. W.....Machinist.

**MILTON.**  
Richmond, N. M., & Co.....Iron Founders.  
Yarborough, Joseph J.....Iron Founder.

**MONCURE.**  
American Iron & Steel Co.

**MORGAN'S MILLS.**  
Morgan, Henry.....Machinist.  
Ramsey, J. T.....Millwright.

**NEW BERNE.**  
Cuthbert, E. G.....Machinist.  
Edwards, C. R. F.....Boiler Maker.  
Manly, Basil.....Midland North Carolina R. R.  
Manwell & Crabtree.....Machinists.

**NEW GARDEN.**  
Boren, A.....Iron Founder.

**NEWTON.**  
Herman, M.....Mfr. Threshing Machines.  
Self, W. R.....Iron Founder.

**ORANGE FACTORY.**  
Feinton, S. G.....Machinery.

**OXFORD.**  
Hobgood J., & J. L.....Iron Founders.  
Wren, E. M.....Millwright.

**PLYMOUTH.**  
Perry, T. A.....Machinery.

**RALEIGH.**  
Alcott, W.....Machinery.  
Allen & Cram.....Iron Founders.  
Harding, B. R.....Raleigh & Augusta Air Line R. R.  
Kearney & Co.....Iron Founders.  
Mitchell, R. N.....Boiler Maker.  
Smethurst & Heartt.....Machinists.  
Smith, Henry C.....Sheet Iron Worker.  
Stevenson, Thos. S.....Plumber.  
Wray, P. J.....Millwright.  
Wray, T. D.....Millwright.

**ROCKY MOUNT.**  
Rocky Mount Iron Works.

**ROXBORO.**  
Younger, Josephus.....Iron Founder.

**RUFFIN STATION.**  
Alcorn, F. M.....Millwright.

**SALEM.**  
Hege, C. A.....Iron Works.  
Nissen, C. F.....Millwright.  
Nissen, J. I.....Machinist.

**SALISBURY.**  
Frercks, P. A.....Gas Fitter & Machinist.  
Gates, G. W.....Western North Carolina R. R.  
Keen, J. R., & Co.....Machinery.  
Marsh, E. H.....Machinist.  
Meroney & Bro.....Iron Founders.

**SANDY CREEK.**  
McMaster, Wm.....Machinist.

**SASSAFRAS FORK.**  
Stowall, Jno. W.....Iron Founder.

**SCOTLAND NECK.**  
Smith, P. E.....Machinist.

**SHELBY.**

Babington, B. B.....Iron Founder.  
Jackson, C. P.....Iron Founder.

**SNOW CAMP.**

Dixon & Co.....Iron Founders.  
Stafford, Henley & Co.....Iron Founders.

**SNOW HILL.**

Dixon, Ellis.....Millwright.

**TARBORO.**

Edgecombe Agri. Works.

**WAKE FOREST COLLEGE.**

Dunn, W. B.....Iron Founder.

**WARRENTON.**

Collins, L. B.....Iron Founder.

**WARSAW.**

Smith & Bro.....Mfrs. Plows.

**WAYNESVILLE.**

Hopkins, T. J.....Machinist.

**WELDON.**

Howard Bros.....Iron Founders.

**WILMINGTON.**

Bissett, J. Wilmington, Columbia & Augusta R. R.  
Burt, S.....Shipsmith.  
Dart, D. M.....Plumber.  
Grant, R. H., & Co.....Plumbers.  
Hart, Bailey & Co.....Iron Founders.  
Henning, R.....Iron & Steel.  
Holden, S. W.....Gas Fitter.  
Lord, F. G.....Machinist.  
Skinner, Samuel W.....Machinist.

**WILSON.**

Mayo, Mrs. B. A.....Mfr. Plows.  
Murray & Benton.....Machinists.  
Wainwright, Royal & Co.....Iron Founders.  
Wyatt, R. L.....Coppersmith.

**WINSTON.**

Blum, Edmund.....Coppersmith.

**WOODLAND.**

Baughman, K. R.....Machinery.

**YORK COLLEGE.**

Patterson, W. F.....Millwright.

**OHIO.****ADELPHI.**

Riegel, H. D.....Machinist.

**AKRON.**

Akron Boiler Works.  
Akron Chain Works.  
Akron File Works.  
Akron Iron Co.....Rolling Mill.  
Akron Knife Mfg. Co.  
Akron Mfg. Co.....Mfrs. Agl. Impts.  
Aultman, Miller & Co.....Mfrs. Agl. Impts.  
Bardley & Co.....Boiler Makers.  
Carter & Johnston.....Mfrs. Cutlery.  
Coler & Reifsnider.....Plumbers.  
Corner & Planz.....Mfrs. Files.  
Dennis, Jno. M.....Mfr. Mill Picks.  
Eberhard, W. & J. G.....Machinists.  
Field, O. C. & Co.....Mfrs. Mill Picks.  
Freer, N. O.....Machinist.  
Hawkins, Horace R.....Mfr. Agl. Impts.  
Housell, H. B.....Millwright.  
Howard, Frank D.....Mfr. Plows.  
McNeil, James C.....Boiler Maker.  
McNeil, Geo. W. & Sons.....Machinists.  
Miller Chain Co.  
Parker, L. C.....Machinist.  
Biddle, J. H.....Brass Founder.

**AKRON—Continued.**

Riddle & Auble.....Brass Founders.  
Rittenhouse, Geo. E.....Mfr. Tools.  
Robb, John.....Plumber.  
Sanford & Kempel.....Iron, etc.  
Seiberling, Jno. F.....Mfr. Agl. Impts.  
Taplin, Rice & Co.....Founders & Engine Builders.  
Taylor, G. M.....Cleveland, Mount Vernon & Delaware R. R.  
Webster, Camp & Lane Machine Co.  
Whitmore & Barnes Mfg. Co.....Mfrs. Knives.  
Zeller, J. H.....Plumber & Gas Fitter.

**ALLIANCE.**

Bauch, Fred.....Iron Founder.  
Bemenderfer, Ebersole & Co.....Mfrs. Agl. Impts.  
Cline, L. D.....Engines, etc.  
Coates, A. W. & Co.....Mfrs. Agl. Impts.  
Fawcett & Son.....Machinery, etc.  
Held, P. A.....Iron Founder.  
Highlands, S. M. & Co.....Plumbers.  
Keystone Spike Works.  
McFarland, J. W. & Co.....Machinists.  
Millard & Co.....Iron Founders.  
Morgan, Williams & Co.....Mfrs. Steam Hammers.  
Murphy, Wm.....Boiler Maker.  
Ray & Ridge.....Iron Founders.  
Shalters, M. P.....Machinist.  
Woods, James.....Machinist.

**AMHERST.**

Kendeigh, J. E.....Iron Founder.  
Rice & Cook.....Iron Founders.

**ARKANUM.**

McKeon, John.....Millwright.

**ASHLAND.**

Pille & Knoth.....Sheet Iron Workers.  
Taylor, Samuel.....Iron Founder.  
Whiting & Shearer.....Machinists.

**ASHTABULA.**

Ashtabula Bolt & Shaft Co.  
Ashtabula Tool Co.  
Fowley, M. W. & Co.....Plumbers.  
McKinnon Bros.....Machinists.  
Phoenix Iron Works Co.

**ASHTABULA HARBOR.**

McKinnon, W. H.....Machinist.

**ATHENS.**

Athens Car Works.  
Athens Water Wheel & Machine Co.

**ATTICA.**

Hall & Myers.....Iron Founders.

**AUGUSTA.**

Crook, J. & Son.....Machinists.

**BARESVILLE.**

Scott, Jno. C.....Machinist.

**BARNESVILLE.**

Barnesville Foundry & Machine Co.  
Buchanan & Rogers.....Mfrs. Car Wheels.  
Watt Mining Car Wheel Co.....Founders, etc.

**BARTLETT.**

Morrow, J. C.....Machinist.

**BASIL.**

Rolly & Co.....Iron Founders.

**BEACH CITY.**

Eberly, Augustus.....Machinist.

**BELLAIRE.**

Barnhill, J. B.....Boiler Maker.  
Bellaire Nail Works.  
Collins, Wm.....Brass Founder.  
Etna Glass & Mfg. Co.....Machinists.  
Fitton, Jas.....Plumber.  
Heaney, John.....Bellaire & South-Western R. R.  
Johnson, R.....Plumber.  
Johnson, S. J.....Gas Fitter.  
Ohio Valley Foundry Co.  
Redman & Bro.....Gas Fitters.  
Shipman & Nevil.....Machinists.

**BELLEFONTAINE.**

Bowman, J. W. .... Machinist.  
 Everett, C. G. .... Mfr. Agl. Impts.  
 Foos, Lewis. .... Machinery.  
 Howenstein, W. S. .... Plumber.  
 Humphrey, J. A. .... Iron Founder.  
 Lockhart, James L. .... Founder & Machinist.  
 Martin, C. F. .... Machinist.  
 Pollock, Wm. .... Mfr. Plows.  
 Stevenson, J. B. .... Plumber.

**BELLEVILLE.**

Harrington, Wilson S. .... Iron Founder.

**BELLEVUE.**

Bauchman, H. .... Iron Founder.  
 Woodward & Kern. .... Iron Founders.

**BERLIN HEIGHTS.**

Harrison, W. B. .... Machinist.  
 Miller, Jacob M. .... Machinist.

**BETHANY.**

Kain, S. .... Mfr. Agl. Impts.

**BETHEL.**

Green, Chas. .... Machinist.  
 Somermeier, H. G. .... Mfr. Plows.

**BEVERLY.**

Robertson, W. F. & Co. .... Founders & Machinists.

**BLOOMINGBURG.**

McCoy, J. M. .... Mfr. Plows.

**BOWERSTON.**

Bell, W. H. .... Machinist.

**BOWLING GREEN.**

Tabor, B. R. .... Machinist.

**BRIDGEPORT.**

Aetna Iron & Nail Co. ....  
 Hill, Thomas. .... Machinist.  
 Standard Iron Works. ....  
 Williams, S. B. .... Millwright.  
 Woodcock & Son. .... Iron Founders.

**BRYAN.**

Morrison & Fay Mfg. Co. .... Iron Founders.

**BUCYRUS.**

Blair, E. .... Iron & Steel.  
 Brunnert & Gottfried. .... Mfrs. Plows.  
 Bucyrus Foundry & Mfg. Co. ....  
 Deal Bros. Mfg. Co. .... Mill Machinery.  
 Franz & Pope Knitting Machine Co. ....  
 Frey, Sheckler & Hoover. .... Machinists.  
 Morgan, J. B. .... Ohio Central R. R.  
 Shunk, A. .... Mfr. Plows.  
 Stuckey & Diller. .... Iron Founders.

**BURBANK.**

Shoup, G. W. .... Millwright.

**BURTON.**

Burton Machine & Repair Co. ....

**CADIZ.**

Rife, W. H. .... Founder & Machinist.

**CAMBRIDGE.**

Robertson, Thos. .... Cleveland & Marietta R. R.  
 Simon, C. C. & Bros. .... Iron Founders.

**CAMDEN.**

Coone, J. W. .... Iron, etc.

**CANAL DOVER.**

Bodey, Deis & Co. .... Iron Founders.  
 Edwards, Jas. L. & Co. .... Mfrs. Iron.  
 King, James. .... Machinist.

**CANAL FULTON.**

Clark & Quigley. .... Iron Founders.  
 Howenstine, D. J. .... Iron Founder.

**CANFIELD.**

Bobst & Haroff. .... Machinists.

**CANTON.**

Aultman, C. & Co. .... Mfrs. Mowers & Reapers.  
 Ball, A. & Co. .... Mfrs. Plows.  
 Ballard, Jas. F. .... Machinist.  
 Bieshele, L. & Bro. .... Copper-smiths.  
 Bolton Steel Co., The. .... Mfrs. Steel.  
 Bowen, Wm. B. .... Plumber.  
 Bucher, Gibbs & Co. .... Mfrs. Plows.  
 Bush, P. P. .... Founder & Machinist.  
 Canton Car Co. ....  
 Canton Cutlery Co. ....  
 Canton File Co. ....  
 Canton Rotary Engine Co. ....  
 Canton Spring Co. ....  
 Canton Tool Works. ....  
 Diebold Safe & Lock Co. ....

Dillon, G. W. .... Gas Fitter.  
 Ebersole & Kailey. .... Machinists.  
 Elbel, Gilliam & Co. .... Malleable Iron Works.  
 Flohr, James A. .... Pattern Maker.  
 Gibbs Canton Plow Co. ....  
 Hines & Class. .... Mfrs. Saws.  
 Kailey & Ballard. .... Machinists.  
 Miller, Christ'n. .... Brass Founder.  
 Miller Co., The. .... Machinists.  
 Novelty Iron Works. ....  
 Richards, W. C. .... Plumber.  
 Rider, Jas. S. & Sons. .... Millwrights.  
 Roorman, E. W. .... Conotton Valley R. R.  
 Rowan, W. B. .... Plumber.  
 Snyder, C. C. .... Iron & Steel.  
 Theobald & Co. .... Plumbers.  
 Thomas, T. & Son. .... Mfrs. Files.  
 Wernet, H. & Bro. .... Copper-smiths.

**CARDINGTON.**

Hartman, N. W. .... Iron Founder.

**CAREY.**

Ensminger, W. S. .... Machinist.  
 Van Buren & Ryder. .... Iron Founders.

**CARROLLTON.**

Buck, J. G. .... Iron Founder.  
 McConnell & Kerper. .... Machinists.  
 McGuire, E. .... Iron Founder.  
 Smithyman, L. D., & Sons. .... Iron Founders.

**CASSTOWN.**

Jackson, S. .... Machinist.  
 Pence, J. R. .... Machinery.

**CECIL STATION.**

Paulding Iron Co. ....

**CENTERTON.**

Burke, L. D. .... Machinist.

**CHAGRIN FALLS.**

Reed, C. W. .... Machinist.  
 Smith, Ira. .... Machinist.

**CHASE.**

Wood, James. .... Machinist.

**CHILLICOTHE.**

Brown, E. .... Millwright.  
 Chillicothe Foundry and Machine Works. ....  
 Deschler, August. .... Machinist.  
 Foley, Michael. .... Iron Founder.  
 Karvus, W. D. .... Plumber & Gas Fitter.  
 Kopp & Stacey. .... Plumbers.  
 Lefebure, Charles, & Co. .... Copper-smiths.  
 Lemlie, C. C. .... Plumber.  
 Marchal, F. .... Gas Fitter.  
 Olmstead, Charles. .... Mfr Harrows.  
 Pfaff & Ringwald. .... Plumbers.  
 Studer, Conrad. .... Machinist.

**CINCINNATI.****BRASS FOUNDERS.**

Brigler, L. J. .... 171 W. Court.  
 Bourbon Copper & Brass Works. .... 196 E. 1st.  
 Buckeye Bell & Brass Foundry. .... 104 E. 2d.  
 Cummings, J. P. .... 202 E. Front.  
 Dugan, W. F. .... 1 W. Pearl.  
 Dunn, Peter J. .... 218 W. Front.

## CINCINNATI—Continued.

Fewlass, Geo.,	118 E. 2d
Kirkup, Robert & Co.,	60 Lodge.
Kirkup, Wm. & Son.,	cor. Pearl & Ludlow.
Kuehner, Chas. F.,	9 Allison.
Luhrs & Smith,	73 12th st.
Lukensheimer, F.,	15 E. 8th.
Nottingham, T. J. & Co.,	cor. Pearl & Plum.
Powell, Wm. & Co.,	247 & 249 W. 5th.
Richter, Joseph & Co.,	11 E. 9th.
Riegler, Alexander,	10 Home.
Ruthven, John,	222 W. 2d.
Vanduzen & Tift,	102 E. 2d.
Warden, McClelland & Co.,	25 Broadway.

## ENGINE BUILDERS.

Ahren's Mfg. Co.,	22 Webster.
Aultman, C. & Co.,	126 Main.
Blymyer Mfg. Co.,	McLean Ave. & 8th & 9th St.
Bryant & Lord,	844 W. 6th.
Cincinnati Stationary Engine & Hydraulic Works,	cor. 3d & Locke.
Cordesman, S. H. J., Sons,	133 W. 2d.
Dieckman, F.,	82 Harrison av.
Dumont, C. T.,	109 E. Front.
Fritsch & Blettner,	546 Vine.
Globe Foundry & Machine Works,	133 W. 2d.
Greenwald, I. & E.,	248 E. Pearl.
Krieger, Burkhardt & Co.,	737 Central ave.
Lane & Bodley Co.,	cor. John & Water.
Lane & Norton,	145 W. 2d.
Ross, Davis & Co.,	181 E. Front.
Shultz, M.,	170 Plum.
Smith, Myers & Schiney,	322 Front.
Steiger, L.,	cor. Elder & Logan.
Stukenborg & Cain,	122 E. 2d.
Tallmadge, C. S. & Co.,	24 E. 9th.
Warden, McClelland & Co.,	25 Broadway.

## IRON FOUNDERS.

Blymyer Mfg. Co.,	664 W. 8th.
Bryant & Lord,	884 W. 6th.
Chamberlain Stove Co.,	119 Hunt.
Cincinnati Foundry,	2 Lawrence.
Cincinnati Malleable Iron Co.,	143 Elm.
Cincinnati Stove Works,	146 E. Front.
Cordesman, Henry J.,	133 W. 2d.
Davis, W. C. & Co.,	cor. 3d & Smith.
Dumont, C. T.,	111 E. Front.
Dyett, J. & Co.,	cor. Central av. & Front.
Eureka Co-operative Foundry Co.,	123 Gest.
Fol y, Cooney & Co.,	331 to 337 W. Front.
Fritsch & Blettner,	546 Vine.
Greenwald, I. & E.,	248 E. Pearl.
Greenwood, M. & Co.,	cor. Canal & Jackson.
Hamilton Iron Foundry,	cor. John & Water.
Haven, James I. & Co.,	56 Plum.
Hoeflinghoff & Lane,	2 Lawrence.
Innes, Magill & Co.,	6 Burnet House Block.
Jones, L. & Sons,	450 George.
Knecht & Brown,	195 Wade.
Krieger, Burkhardt & Co.,	cor. Central av. & York.
Lane & Bodley Co.,	cor. John & Water.
Moore, Harkness & Bayless,	181 W. 5th.
Moorman & Co.,	706 W. Front.
Mowry Car-wheel Works,	cor. Lewis & Eastern av.
Rankin, C. S. & Co.,	185 W. Pearl.
Redway & Burron,	cor. Harriet & Richmond.
Resor, Wm. & Co.,	cor. Front & Smith.
Shepard, H. L. & Co.,	341 W. Front.
Stacy Mfg. Co.,	33 Mill.
Tatum, Samuel C. & Co.,	cor. John & Water.
Williamson, Samuel,	214 E. Front.

## IRON MANUFACTURERS.

American Galvanizing Works,	298 E. Pearl.
Anchor Iron & Steel Works,	184 W. 2d.
Belmont Iron Works,	53 W. 3d.
Crescent Iron Works,	cor. 2d & Vine.
Dayton, L. M. & Co.,	184 W. 2d.
Glabe Rolling Mill Co.,	163 W. Pearl.
Licking Rolling Mill Co.,	109 W. 2d.
Mitchell, Tranter & Co.,	cor. 2d & Race.
New York & Ohio Iron & Steel Co.,	cor. 2d & Vine.
Norton Iron Works,	3 Johnston Buildings.
Ohio Valley Steel & Iron Works,	cor. 2d & Race.
Portsmouth Iron & Steel Co.,	13 Sycamore.
Riverside Iron Works,	cor. 4th & Main.
Swift's Iron & Steel work,	26 W. 3d.

## CINCINNATI—Continued.

## IRON &amp; STEEL DEALERS.

Addy, Matthew & Co.,	Pike's Opera B'ld'ng.
Ashbrook, Tucker & Co.,	8 & 9 Public Landing.
Black Diamond Steel Works,	64 W. 2d.
Block & Pollak,	cor. 3d & Plum.
Bremfoerder, Henry,	937 Central ave.
Chromo Steel Works,	123 Central ave.
Goshorn, A. O.,	17 Wiggins' Block.
Harper, E. L. & Co.,	30 W. 3d.
Hazen, J. F. & Co.,	cor. 4th & Main.
Hutchinson, E. A.,	53 W. 3d.
Jessop, Wm. & Sons,	53 W. 2d.
Lawson, F. H. & Co.,	188 Main.
Means, W. & Co.,	12 Johnston Buildings.
Morris, Reith & Co.,	224 W. 2d.
Myres, I-dore,	130 W. 2d.
Pappenheimer Hardware Co.,	107 W. Pearl.
Park, Brother & Co.,	64 W. 2d.
Schulte, G. B. & Son,	261 Main.
Warner, L. E.,	13 Johnston Bldg.
Weber & Co.,	360 Main.
Wessel, August,	53 W. 2d.
Wolf & Co.,	584 Central ave.
Woodrow, D. T.,	1 Johnston Building.
Woodrow & Stewart,	186 W. 2d.

## MACHINERY DEALERS.

Combs, Joseph,	120 W. 2d.
Fay, J. A. & Co.,	cor. John & Front.
Hesser, C. F.,	10 Pike's Opera Building.
Lane & Bodley Co.,	cor. John & Water.
Lautenschlager, G.,	21 W. 4th.
Leavitt, W. D.,	57 W. 3d.
Mayfield, W. P.,	57 W. 6th.
Michaels & Schuerman,	145 W. 2d.
Post & Co.,	161 W. Pearl.
Reinshagen & Buckmad,	87 E. 8th.
Roth, Lawrence,	93 & 95 E. 8th.
Ryan, Thos. H. & Co.,	92 E. 2d.
Schreiber, Leonard & Sons,	621 Walnut.
Sexton & Co.,	88 E. 2d.
Stacy Mfg. Co.,	16 Ramsay.
Tallmadge, C. S. & Co.,	24 E. 9th.
Universal Machine Works,	579 Elm.
Warden, McClelland & Co.,	25 Broadway.
Wolf, Frederick,	cor. 13th & Walnut.
Wolf, Wm.,	488 McMillan.

## MACHINISTS.

Baumer, Nunning & Co.,	274 W. Front.
Bickford, H.,	179 E. Front.
Blymer Mfg. Co.,	664 W. 8th.
Bryant & Lord,	884 W. 6th.
Cincinnati Stationary Engine & Hydraulic Works,	cor. 3d & Locke.
Conway, M. R.,	cor. 4th & Walnut.
Cordesman, Egan & Co.,	242 W. Front.
Cordesman, H. J., Sr.,	133 W. 2d.
Cummings, J. P.,	202 E. Front.
Dennis, Neal M.,	13 Home.
Dumont, C. T.,	111 E. Front.
Fay, J. A. & Co.,	cor. Front & John.
Fewlass Geo.,	118 E. 2d.
Francis, Chas. E.,	61 Central ave.
Fritsch & Blettner,	546 Vine.
Goble Bros. & Co.,	129 Gest.
Greenwald, J. & E.,	248 E. Pearl.
Hennessey, John R.,	560 John.
Hilbert, C. B.,	18 Genessee.
Home Street Machine Works,	2 Home.
Kernan, G.,	81 McLean ave.
Ketterlinus, C. W.,	171 W. 2d.
Krieger, Burkhardt & Co.,	cor. York & Central ave.
Kuehnle, John,	cor. 2d & Central ave.
Lane & Bodley Co.,	cor. John & Water.
Lautenschlager, G.,	21 W. 4th.
Lee & Norton,	cor. 2d & Elm.
Link, Valentine,	598 Walnut.
Lodge, Barker & Co.,	602 W. 5th.
McFarlan & Nottingham,	220 W. 2d.
McGowan, John H. & Co.,	134 W. 2d.
McGowan Pump Co.,	141 W. 2d.
Manning, J. H.,	173 Race.
Menke & Co.,	17 W. 8th.
Metzger, John,	81 McLean ave.
Miller, L. J.,	Harrison ave. nr. Brighton Station.

## CINCINNATI—Continued.

Nottingham, T. J. & Co.,	.....cor. Pearl & Plum
Osterlein, W. & Bernhardt,	.....13 Home-
Osburg, Frank,	.....668 Central ave.
Passe, Ernst,	.....579 Elm
Queen City Machine Works,	.....87 E. 8th
Reedy, H. J.,	.....128 E. 8th
Robinson, J. M. & Co.,	.....225 W. 2d
Ross, Davis & Co.,	.....181 E. Front
Schreiber, L. & Sons,	.....521 Walnut
Schultz, M.,	.....170 Plum
Shepard, H. L. & Co.,	.....34 W. Front
Simpson & Gault,	.....cor. John & Front
Slack, J. H. & Co.,	.....112 W. Court
Slack & Midgley,	.....cor. Elm & 2d
Snusser, Jos.,	.....47 Water
Steigert, Leopold,	.....cor. Elder & Logan
Steinmann, Chas.,	.....29 Spring Grove av.
Stepcoe, John & Co.,	.....214 W. 2d
Stuckenborg & Cain,	.....122 E. 2d
Tatum, Samuel C. & Co.,	.....cor. John & Water
Universal Machine Works,	.....579 Elm
Warden, McClelland & Co.,	.....25 Broadway
Williamson, Samuel,	.....214 E. Front
Wilson, John J.,	.....235 Race
Wolf, Fred,	.....cor. 13th & Walnut

## PLUMBERS, STEAM &amp; GAS FITTERS.

Allison, James,	.....122 Main
Ashcraft, Chas. E.,	.....213 Betts
Attlesley, James,	.....321 Vine
Aylward, N. K.,	.....436 W. Court
Beggs, Henry,	.....163 Central av.
Bennett & King,	.....354 W. 6th
Bowman, W. N.,	.....3 Hammond
Bromley, Thomas,	.....River Road, 21st Ward
Burke, Michael,	.....73 E. 5th
Busch, G. H. L.,	.....541 Main
Carroll, Robert,	.....51 E. 3rd
Cincinnati Steam Heating Co.,	.....187 W. Pearl
Cochran, J. L.,	.....219 Broadway
Coffey, Patrick T.,	.....320 Main
Coleman Gas Works M'fg Co.,	.....292 Main
Cooney, B. J. & Bro.,	.....243 W. 5th
Cronwell, F.,	.....113 Cutter
Danenholt, B. & Co.,	.....99 W. 5th
Dingler, L. E.,	.....290 Cutter
Douglas, John,	.....Mason St., Mt. Auburn
Eichert, Geo.,	.....1006 Central av.
Elzenhoefer, Geo.,	.....317 Freeman av.
Felix, Lewis,	.....923 Central av.
Fewlass, George,	.....118 E. 2d
Ganzmiller, John,	.....366 McMicken av.
Garrety, Peter,	.....cor. 6th & Park
Gibson, James A.,	.....273 Broadway
Gibson, John & Co.,	.....274 Main
Gibson, Thos. & Co.,	.....200 Vine
Gibson & Krouse,	.....141 Central av.
Herbert, Henry,	.....138 Poplar
Hill, W. J.,	.....150 Linn
Hogan, P. J.,	.....68 E. 4th
Huber, N.,	.....cor. Green & Pleasant
Huddart & Rigdon,	.....12 W. 2d
Hunnell, E.,	.....cor. 7th & John
Jones, John,	.....cor. 7th & Cutter
Judd, Wm. W.,	.....251 Freeman av.
Kirkup, W. & Son,	.....cor. Pearl & Ludlow
Kline, Michael,	.....400 Central av.
Lamping F.,	.....cor. Woodburn av. & Madisonville Pike
Lamping, F.,	.....118 W. Court
Lamping, H. A. & Son,	.....412 Sycamore
Larkin, T.,	.....281 W. 4th
Laumann, J. B.,	.....611 Walnut
Lee & Norton,	.....cor. 2d & Elm
Lynn, Jas. E.,	.....165 Richmond
Lynn, Wm. & Co.,	.....143 W. 6th
McCann, J. J. & Co.,	.....287 John
McCullum, Robert,	.....139 W. 6th
McCullum, H. & Co.,	.....282 Race
McHenry & Co.,	.....8 E. 4th
McNeill, John,	.....8th & Walnut
Manning, J. H.,	.....173 Race
Metzger, John,	.....81 McLean av.
Meunier, Jos. & Co.,	.....214 Elm
Murdock, J. G. & Co.,	.....195 W. 5th
Murphy, Richard,	.....134 Sycamore
Myers, Cornelius W.,	.....513 McMillan

## CINCINNATI—Continued.

Neski, Thos. G.,	.....380 W. Court
Newarth, Frank,	.....205 E. Pearl
Newman, Thos. J.,	.....196 W. 7th
Nottingham, T. J. & Co.,	.....cor. Pearl & Plum
O'Brien, Arthur,	.....114 W. 6th
O'Flaherty, Patrick L.,	.....cor. Park & 5th
O'Hara, Thomas,	.....96 Linn
Parry, E. R.,	.....Gilbert av. nr Curtis
Rattermann Bros.,	.....577 Elm
Reenan, Thos.,	.....33 E. 3d
Reichling, John,	.....550 Central av.
Ricketts, Wm.,	.....154 Main
Schlemmer, Oliver,	.....450 Linn
Schonhoff, J. H.,	.....503 Main
Semple, James,	.....739 Freeman av.
Simpson, W. M.,	.....383 W. 7th
Stacy, John A.,	.....162 Central av.
Story, John,	.....375 W. 6th
Strubbe, J. E.,	.....547 Freeman av.
Stuckenborg & Cain,	.....122 E. 2d
Sullivan, D. & Son,	.....206 Central av.
Sutkamp, H. H.,	.....182 Linn
Talmdage, Chas. S.,	.....277 Vine
Taubel, Geo. Jr.,	.....1022 Central av.
Underhill, John T.,	.....41 E. 3rd
Usborne, H. J.,	.....18 Broadway
Van Durzen & Froome,	.....57 E. Front
Wagner, H.,	.....660 W. 6th
Wagner, W. F.,	.....416 Colerain Av.
Warden, McClelland & Co.,	.....25 Broadway
Woodburn, Robert,	.....392 Vine
Yingling, J. A.,	.....18 Public Landing
Young, G. J.,	.....195 W. 5th
Young, John,	.....61 Broadway
Young, John,	.....556 Vine
Zeigler, John A.,	.....38 W. Court

## MISCELLANEOUS.

Armstrong, Jas. A., Sheet Iron Worker,	234 Court
Baldridge, J. W. & Co., Mfrs. Saws,	.....9 Vine
Berkheimer, C. & W. & Co., Iron Workers,	.....McMicken av. opp Race
Bickford, H., Machinists' Tools,	.....179 E. Front
Bode & Binder, Mfrs. Plows,	.....697 Central av.
Bourbon Copper & Brass Works, Coppermiths,	.....196 E. Front
Bradford, Thos. & Co., Millwrights,	.....61 Walnut
Buchert, P., Sheet Iron Worker,	.....89 E. Front
Burnet & Co., Architectural Iron Wrks.,	160 W. 2d
Chace, C. B. & Co., Steam Fitters' Supplies,	.....18 Water
Cincinnati Corrugating Co., Mfrs. Shutters, etc.,	.....cor. 4th & Main
Cincinnati Chain Works & Rolling Mill,	.....11 N. Providence
Cincinnati Lead Pipe & Sheet Lead Works,	.....17 E. 9th
Cincinnati Railway Supply Co.,	.....53 W. 2d
Cincinnati Safe & Lock Co., Mfrs. Safes & Locks,	.....43 Elm
Cincinnati Screw & Tap Co., Mfrs. Machine Screws,	520 Vine
Cincinnati Spring Works, Mfrs. Springs,	.....8th and Gest, 21st Ward
Cincinnati Tool Co., Mfrs. Tools,	.....216 W. 2d
Clegg, David, Mfr. Edge Tools,	.....112 Linn
Clements, M., Architectural Iron Works,	.....cor. Hathaway & Baymiller
Cluthe, G. & Co., Mfrs. Shears,	.....10 W. 1st
Columbia Car Spring Mfg. Co.,	.....123 Central av.
Consolidated Time Lock Co., Mfrs. Locks,	.....161 W. 3rd
Cottman & Co., Mfrs. Plows,	.....9 W. 2d
Crescent Tube Co., Mfrs. Iron Pipe,	.....15 Public Landing
Crittenden, Johns & Co., R. R. Supplies,	.....19 E. 2d
Deckebach, F. C., Coppermiths,	.....171 W. Court
Dennis, Neal M., Millwright,	.....13 Home
Dumont, C. T., Boiler-maker,	.....111 E. Front
Eagle Zinc Works,	.....Hatmaker St., 21st Ward
Eckford, Jas., Cincinnati, Hamilton & Dayton R. R.	
Elk, Chas. F., Millwright,	.....324 Broadway
Emrich, Philip, Mfr. Cutlery,	.....354 Main
Farist Steel Co., Mfrs. Springs,	.....19 E. 2d
Flint, E. H., Mfr. Locks,	.....936 Easton av.

## CINCINNATI—Continued.

Fulton Gravity Scale Co.,.....Mfrs. Scales.  
161 Central av.  
Gebhardt, Wm., Mfr. Files,.....35 McMicken av.  
Goering, Nicholas, Coppersmiths,.....5 Buckeye.  
Gray, Geo., A. Jr. & Co., Mfrs. Machine Tools,.....  
17 E. 8th.  
Greenwald, I. & E., Boiler-makers,.....248 E. Pearl.  
Hall's Safe & Lock Co., Mfrs. Locks,.....cor. Pearl  
and Plum.  
Hand, S. Mfg. Co.,.....Mfrs Iron Mantels, Gates, etc.  
273 W. 5th.  
Hardesty, R. E., Mfr. Augers,.....105 E. 5th.  
Hatter-ley, J., Saw Mfr.,.....3 E. 7th.  
Hendricks, Geo. A. & Co.,.....Sheet Iron Worker.  
6 Main.  
Henrickson & Bro., Mfrs. Scales,.....389 Vine.  
Hesser, C. F., Railroad Supplies,.....10 Pike's  
Opera Building.  
Hirschauer & Co., Boiler-makers,.....120 E. 2d.  
Hoffman & Ahlers, Coppersmiths,.....89 E. Front.  
Hogan, P. J., Mfr. Saws,.....213 W. 2d.  
Homer, I. C.,.....Cincinnati, Georgetown & Ports-  
mouth R. R.  
Honhrrst, Littleford & Co.,.....Sheet Iron Workers.  
121 E. Front.  
Hull, Jos. E., Mfr. Shears,.....137 E. Pearl.  
Isham, Jno. G. & Co., Mfrs. Gas Machines, 159 W. 4th.  
Jones, Robert & Co., Boiler Makers,.....133 E. Pearl.  
Jurgens, Aug., Mfr. Steel Springs,.....399 Vine.  
Kennan, J. P. & Co., Sheet Iron Wrks, 103 E. Front.  
Keifer, Edward, Mfr. Files,.....12 McMicken av.  
Kimball & Co., Mfrs. Saws,.....41 W. Court.  
Lape, J. A. & Co., Mfrs. Machine Knives,.....139 E.  
Pearl.  
Luebbing, F. W. & Co., Coppersmiths, 134 W. Court.  
McIlvain & Spiegel, Boiler Makers,.....cor. Pearl &  
Lawrence.  
McLean, Robert L., Sheet Iron Worker,.....27 Sycam-  
ore.  
Macneale & Urban, Mfrs. Safes,.....166 W. Pearl.  
Merrie, Verhage & Co., Mfrs. Lead Pipe, 13 W. 7th.  
Meyersieck, M. & Co., Mfrs. Zinc,.....Hatmaker St.,  
21st ward.  
Michaels & Schuerman, R'road Supplies, 145 W. 2d.  
Molloy, P. F., Galvanized Iron Works, 129 George.  
Morris, Reith & Co., Mfrs. Files,.....224 W. 2d.  
Morris Sash Lock Mfg. Co.,.....214 Elm.  
Mosler, Bahmann & Co., Mfrs. Safes,.....164 Water.  
Mosler Safe & Lock Co.,.....92 Elm.  
Nicolai, Chas. & Co., Iron Workers, 281 Broadway.  
Ohio Mfg. Co., Mfrs. Knives, etc.,.....162 Vine.  
Passe, Ernest, Millwright,.....579 Elm.  
Perin & Gaff Mfg. Co., Mfrs. Hardware,.....60 to 58  
Commerce.  
Pickering, T. & A., Mfrs. Machinists' Tools, Main &  
5th.  
Post & Co., Railroad Supplies,.....261 W. Pearl.  
Queen City Lead Pipe Works,.....262 Race.  
Raymond, Hilsinger & Co., Mfrs. Plows,.....614 Main.  
Reiss, W. C., Metal Spinner,.....74 W. Court.  
Riggs, F. W., Mfr. Nuts,.....256 Walnut.  
Rolling, John, Sheet Iron Worker,.....131 E. Front.  
Rowe, George, Mfr. Saws,.....249 W. Pearl.  
Sausser & Haller, Coppersmiths,.....734 Central av.  
Schrichten, Gerhard, Mfr. Shears,.....262 Main.  
Schroder, J. B., Mfr. Locks,.....3rd cor. Elm.  
Schroeder Lock Co., Mfr. Locks,.....16 E. 7th.  
Schultz, Adam, Millwright,.....786 Central av.  
Schumacher, Wm., Mfr. Iron Railings,.....620 Main.  
Scott & Co., Mfrs. Iron Railings,.....75 E. Front.  
Simon, Aug., Sheet Iron Worker,.....143 E. 2d.  
Smith Bros. & Co., Mfrs. Hardware,.....26 W. 4th.  
Stiles & Co., Mfrs. Iron Measures, 1590 Eastern av.  
Tudor Boiler Mfg. Co.,.....246 E. Pearl.  
Vanduzen & Froome, Sheet Iron Workers,.....57 E.  
Front.  
Walton, E. H., Mfr. Iron Railings,.....226 W. Pearl.  
Walton, J. P. & Co., Mfrs. Iron Railings, 552 W. 6th.  
Watrous, J. J., Mfr. Saws,.....40 Emery Arcade.  
Wayne Hardware Co., Mfrs. Hardware,.....140 Main.  
Weber, P., Mfr. Cutlery,.....16 E. 5th.  
Wendt, Henry, Mfr. Chains,.....106 E. 2d.  
Wilkins, Asa, Mfr. Saws, Mead av. nr Congress av.  
Witt & Brown, Galvanized Iron Works, 144 W. 3rd.  
Wood, V. B., Millwright,.....214 W. 2d.  
Woodrough & McParlin, Mfrs. Saws,.....cor. 6th &  
Hoadly.

## CIRCLEVILLE.

Moore, E. D.,.....Gas Fitter.  
Schwartz, W. C., & Son,.....Mfrs. Plows.  
Scioto Machine Works.

## CLEVELAND.

## IRON FOUNDERS.

Bowler & Co.,.....9 to 13 Winter.  
Brooks, T. H.,.....708 Lake.  
Buckeye Stove Co.,.....Platt & C. & P. R. R.  
Carpenter, S. M.,.....202 Merwin.  
Cash Stove Co.,.....26 Superior.  
Chambers & McBeth,.....48 W. Centre.  
Cleveland Co-operative Stove Co., 26 to 36 Superior.  
Cleveland Wheel and Foundry Works,.....20 Carter.  
Cummer Engine Co.,.....Lake, cor. Kirtland.  
Fitzsimmons, Wm. & Son,.....435 Broadway.  
Fuller, Warren & Co.,.....76 River.  
Gilmore, Smith & Co.,.....875 Pearl.  
Lake Shore Foundry,.....Foot of Alabama.  
Maher & Brayton,.....20 Carter.  
Myers, Osborne & Co.,.....213 W. River.  
Newcomb, W. F.,.....415 Ontario.  
Nichols & Rolder,.....1544 Dickermann.  
Palmer & DeMooy,.....96 Merwin.  
Shurmer & Massey Mfg. Co.,.....18 Centre.  
Simpson & Wachalac,.....101 Chambers.  
Taylor & Boggis,.....65 Central Way.  
Union Foundry Co.,.....17 E. Main.  
Viaduct Foundry Co.,.....409 to 421 Detroit.

## IRON AND STEEL.

Adams, Hoynes,.....351 Superior.  
Bingham, Wm. & Co.,.....150 Water.  
Cleveland, Brown & Co.,.....17 Merwin.  
Condit, Fuller & Co.,.....342 Spring.  
Hillerman & Co.,.....38 S. Water.  
McCurdy, W. H. & Co.,.....11 National Bank Bld'g.  
McIntosh, Good & Co.,.....116 Superior.  
Otis Iron & Steel Co.,.....Lake cor. Lawrence.  
Raynolds & Co.,.....96 Superior.  
Weeks, Cha. L.,.....140 St. Clair.  
Worthington, Geo. & Co.,.....90 Water.

## MACHINISTS.

Atchison, James,.....52 Coral.  
Atherton, E. F.,.....959 Scranton.  
Barrett, Geo.,.....167 Orange.  
Baster & Gebhard,.....59 Centre.  
Bright, Fred. E.,.....829 Sheriff.  
Brush Electric Co., The,.....379 Euclid.  
Burton, C. H.,.....cor. Main & Centre.  
Cain, T. J.,.....829 Sheriff.  
City Machine Co.,.....1 to 5 Michigan.  
Cleveland Machine Co.,.....90 Leonard.  
Cox & Prentiss,.....24 to 26 West.  
Demming, B.,.....222 Dare.  
Doll, Arnold Jr.,.....169 Willey.  
Eagle Machine Works,.....23 Columbus.  
Eynon, W. R. & Son,.....100 York.  
Gairing, G. A.,.....863 Pearl.  
Gerlach, Peter & Co.,.....61 Centre.  
Globe Iron Works,.....Spruce cor. Elm.  
Hartz, Henry V.,.....21 Champlain.  
Herring, J.,.....854 Loraine.  
Hitz, F.,.....27 Vine.  
Holt Mfg. Co.,.....53 Centre.  
Honsbery, J. H.,.....197 Woodland.  
Konigslow, Otto,.....47 Michigan.  
Kritch, K. E.,.....42 S. Water.  
Leighton & Bruch,.....Hamilton nr. Wason.  
Lord, Bowler & Co.,.....33 Centre.  
Manning, T. Jr. & Co.,.....100 Merwin.  
Mertz, A. F.,.....112 Champlain.  
National Machinery Co.,.....384 Superior.  
Novelty Iron Works,.....Hamilton cor. Wason.  
Oram, J. S.,.....155 River.  
Purdy Machine Co.,.....63 Centre.  
Scherer & Moll,.....57 Centre.  
Schneider & Trenkamp,.....66 Centre.  
Shaw, Geo. W.,.....144 Superior.  
Smith, J. Noyes,.....57 S. Water.  
Smith & Lowell,.....116 Elm.  
Stockwell Screw & Machine Co.,.....990 Payne Av.  
Stovering & Fleming,.....Columbus cor. Leonard.  
Thorpe, H. H. Mfg. Co.,.....147 St. Clair.  
Union Machine Works, Wason, C. & P. R. R. Crossing.  
Variety Iron Works,.....51 to 73 Scranton Av.

## CLEVELAND—Continued.

Waldec, A. ....2482 Broadway  
 Warner & Swas y.....E. Prospect, nr. C. & P. Ry.  
 Worwick Mfg. Co. ....Merwin, cor. Centre  
 York, S. M. ....57 S. Water.  
 Zluhan, Fred. ....144 Champlain.

## PLUMBERS STEAM AND GAS FITTERS.

Bennett Bros. ....1216 Euclid Ave.  
 Born, F. & H. ....125 Superior.  
 Born's, C. P. Son. ....15 Prospect.  
 Burrows & Bosworth. ....1218 Euclid Ave.  
 Carothers, A. A. ....338 Superior.  
 Chafer, Becker & Doughty. ....8 Champlain.  
 Cunningham, W. E. ....264 Pearl.  
 Daykin Bros. ....398 Pearl.  
 Desnoyers & Co. ....162 Prospect.  
 Dewstoe, C. C. ....93 Seneca.  
 Eckhardt, A. W. ....43 Prospect.  
 Gill, Robt. Jr. ....361 Bond.  
 Graves, J. J. ....359 Euclid Ave.  
 Gumlich, Chas. Sr. ....690 Lorain.  
 Harper & Edson. ....1047 Pearl.  
 Hart, Clinton. ....362 Superior.  
 Hausmann, A. & Son. ....47 Scovill Ave.  
 Henderson, E. ....399 Ontario.  
 Huff, Frank J. ....29 Prospect.  
 Johnson, Robert. ....280 Broadway.  
 Kelley, Geo. ....1203 Euclid Ave.  
 Kennedy, DeForest, Parsons, & Co. ....94 Superior.  
 Maitland, Jno. ....2536 Broadway.  
 Mark, J. ....43 Prospect.  
 Mathivet, V. P. ....352 Superior.  
 Murphy, M. M. & Co. ....75 Merwin.  
 Nixon, J. W. ....8 Bushnell.  
 O'Donnell, Walter. ....11 S. Water.  
 Paine, Geo. S. ....362 S. Superior.  
 Richter, W. F. & Son. ....54 S. Clair.  
 Riehl, Christopher. ....197 Ontario.  
 Ring, W. T. ....144 Champlain.  
 Roberts, L. R. ....40 Prospect.  
 Schreiner & Co. ....612 Pearl.  
 Selzer, C. A. ....311 Euclid Ave.  
 Smith & Connors. ....385 Bond.  
 Stein, B. ....202 Ontario.  
 Strater, A. F. & H. ....90 Erie.  
 Thomson, John. ....95 River, on Dock.  
 Trunk, Christian. ....572 Ontario.  
 Van Tas-ell, A. T. & Co. ....653 Detroit.  
 Wadsworth, F. A. ....79 Michigan.  
 Wood, S. R. & Bro. ....202 Woodland Ave.

## MISCELLANEOUS.

Atkins & Clark, Iron Works. N. Y., P. & O. & C. P. R. R.  
 Bosworth, B. C. Valley Railway.  
 Bourne & Knowles Mfg. Co., Mfrs. Nuts. ....Main,  
 cor. Elm.  
 Bright, F. E., Mfr. Light Castings. ....829 Sheriff.  
 Britton Iron & Steel Co. ....Foot of Wason.  
 Brown Mfg. Co., Brass Works. ....16 to 22 Frankfurt.  
 Carnegie, N. & P., Brass Founders. ....24½ S. Water.  
 Chamberlain, E. K., Iron Works. ....89 Seneca.  
 Chapin Bolt & Nut Co. ....63 River.  
 Chatterton, Jos. & Co., Boiler Makers. ....30 W. Centre.  
 Chisholm Steel Shovel Works. ....177 Case.  
 Cleveland Axle Mfg. Co. ....475 Broadway.  
 Cleveland Bridge & Car Works. ....121 Superior.  
 Cleveland City Forge & Iron Co. ....Case cor. Lake.  
 Cleveland Crucible Steel Co. Garden C. P. Ry. Crsg.  
 Cleveland Hardware Co. ....Mfrs. Hardware.  
 C. & P. Ry. nr. Euclid.  
 Cleveland Iron Co. ....122 Water.  
 Cleveland Machinery Depot. ....Foot of Superior.  
 Cleveland Malleable Iron Co. Platt cor. C. & P. Ry.  
 Cleveland Nut Co. ....C. C., C. & I. Ry. nr. Girard.  
 Cleveland Rolling Mill Co. ....99 Water.  
 Cleveland Spring Co. ....West River cor. Winslow.  
 Cleveland Steam Gauge Co. ....211 Superior.  
 Cleveland Wrought Iron Fence Works. ....21 Water.  
 Clifford, Michael. ....Architectural Iron Works.  
 30 S. Water.  
 Colwell & Collins, Mrs. Bolts. Girard n. C. C. & I. R. R.  
 Commonwealth Iron Co., Mfrs. Iron. 45 Atwater Bdg.  
 Cooper, Geo. & Co., Mfrs. Springs. ....88 Superior.  
 Cottrell, W. L. & Co., Pattern Makers. ....33 Centre.  
 Cummer Engine Co., The. Mfrs. Boilers & Engines.  
 Lake cor. Kirtland.  
 Curry Iron Co., Mfrs. Iron. ....130 Water.

## CLEVELAND—Continued.

Cuyahoga Steam Furnace Co. ....Boiler Makers.  
 Detroit cor. Centre.  
 Dornier & Nolte, Mfrs. Agl. Impls. ....17 Columbus.  
 Eberhardt Mfg. Co. ....Pattern Makers.  
 C. & P. Ry. south of Woodland.  
 Ebert, G. C., Mfr. Tools. ....90 Ohio.  
 Emery, H. L., Engine Builder. ....211 Superior.  
 Farnan, J. P., Brass Founder. ....23 Centre.  
 Fisher, A. ....Machinery.  
 Forest City Machinery Depot. ....48 Merwin.  
 French, Geo. W., Pattern Maker. ....340 Franklin.  
 Fuller, Wm. ....New York, Penna. & Ohio R. R.  
 Gale, Geo. R., Mill Machinery. ....68 River.  
 Gerlach, P. & Co., Mfrs. Saws and Files. ....51 Centre.  
 Gibson & Price. ....Mfrs. Sheet Lead & Pipe,  
 69 Columbia.  
 Gorris, J., Mfr. Iron Fences. ....96 Champlain.  
 Gray, Robert. ....Brass Founder. ....105 Main.  
 Hotchkiss & Upson Co., The. ....Bolt Works,  
 Junction of C. C. & I. & N. Y. P. & O. R. R.  
 Isbester, Thos., Pattern Maker. ....76 Church.  
 Jackson Iron Co., Mfrs. Iron. ....130 Water.  
 Jones & VanWle, Machinery. ....221 River.  
 Kennedy, J. V., Brass Founder. ....191 Leonard.  
 King Iron Bridge & Mfg. Co. ....Water cor. St. Clair.  
 Konz, Fred., Mfr. Tools. ....841 Scranton.  
 Lake Erie Iron Co., Mfrs. Iron. ....104 St. Clair.  
 Lake Huron Iron Co. ....Mfrs. Iron,  
 13 National Bank Building.  
 Lake Superior Iron Co., Mfrs. Iron. ....130 Water.  
 Lamson, Sessions & Co. ....Mfrs. Bolts & Nuts,  
 cor. Scranton & Fairfield.  
 Lohmeyer & Cordon, Pattern Maker. ....87 Centre.  
 Luhtkemeyer, H. W., Mfr. Harrows. ....150 Superior.  
 Lyman, C. C., Mfr. Scales. ....9 Slater.  
 McComber Iron Co. The. Mfrs. Iron. ....78 Viaduct.  
 Marquette Iron Co., Mfr. Iron. ....Atwater Bldg.  
 Masters, Edgar, Shipsmith. ....99 Kentucky.  
 Miller, J., Boiler Maker. ....Hamilton nr. Wason.  
 Mittinger, Geo., Metal Spinner. ....33 St. Clair.  
 Moores, A. H. & Co., Mfrs. Files. ....19 Columbus.  
 O'Rourke, M. L. & Co., Mfrs. Saws. ....55 S. Water.  
 Ohio Agricultural Co. ....147 Seneca.  
 Parker, M. & Co., Machinery. ....147 Seneca.  
 Parkin File Co., Mfrs. Files. Payne, cor. Hoadley.  
 Parkin, W. H. & Co., Mfrs. Files & Saws. ....11 S.  
 Water.  
 Parkin & Ryan, Galvanized Iron Workers, Michi-  
 gan, cor. Seneca.  
 Peck, Stow & Wilcox Co., Mfrs. Hardware. Central  
 Way at Upper Bridge.  
 Pittsburgh & Lake Angeline Iron Co. ....130 Water.  
 Powell Tool Co. ....31 Elm.  
 Pratt, F. B., Pattern Maker. ....49 Tracy.  
 Pratt, I. H., Machinery. ....15 S. Water.  
 Price, W. H. Jr. & Co., Mfrs. Printing Presses. ....10  
 First Av.  
 Ranney, Chas. P., Brass Founder. ....33 King.  
 Reid, J. C. & Co., Pattern Makers. ....52 Canal.  
 Republic Iron Co., Mfrs. Iron. ....1 Atwater Bldg.  
 Rigby Car Wheel Co. ....American House.  
 Rounds, David & Co., Mfrs. Chains, 2316 Broadway.  
 Ryan, Wm., Brass Founder. ....83 Washington.  
 Sayles & Anderson Mfg. Co., Brass Founders, Jones  
 Av. W. Cleveland.  
 Schorndorfer, E. F., Pattern Maker. ....6 Champlain.  
 Sedgley, Jas. ....Lake Shore & Mich. Southern R. R.  
 Shipherd, W. C., Mfr. Bolts & Nuts. ....287 Garden.  
 Smith & Treachout, Boiler Makers, 439 Broadway.  
 Standard River Co. ....100 Leonard.  
 Turreff, W. F., Cleveland, Columbus, Cincinnati  
 & Indianapolis Railway.  
 Union Rolling Mill Co. ....122 Water.  
 Union Steel Screw Co. ....Case, cor. Payne.  
 Variety Iron Works Co. ....51 to 73 Scranton.  
 Ward & Jackson, Shipsmiths. ....49 Main.  
 Warden, Jno., Pattern Maker. ....208 Hamilton.  
 Wheeler, G. W., Mfr. Tools. ....35 Canal.  
 Whitehouse, J. A. & Co., Mfrs. Gas Fixtures. ....829  
 Sheriff.  
 Whittingham, J. C., Pattern Maker. ....52 Canal.  
 Woodhill & O'Gorman, Mfrs. Iron Fence. ....209  
 Spring.  
 Woodhouse, Samuel, Mfr. Chains, Stafford, nr. C.  
 and P. R. Crossing.  
 Worden, C., Mfr. Tools. ....37 Columbus.  
 York, S. M., Machinists' Supplies. ....57 S. Water.



**CLYDE.**

Hughes, W. J. .... Mfr. Edge Tools.  
 Starck, L. G. .... Machinist.

**COLD WATER.**

Mautz, John. .... Machinist.

**COLUMBIANA.**

Columbiana Enterprise Works. .... Machinists.

**COLUMBUS.****IRON FOUNDERS.**

Croft's Iron Works. Merion, Hertenstein & Co.  
 Emmick & Hatcher. Ogden, T. P.  
 Emrich, C. Patton Mfg. Co.  
 Franklin Iron W'ks Co. Schreyer, G.  
 Gill, George W. Schilling, Samuel.  
 Harker Mfg. Co. Thomas Iron Works.  
 Hayden, P., & Sons. Vulcan Iron Works Co.  
 Loudenslager & Co.

**MACHINISTS.**

Capital City Mach. W'ks. Lechler Mining Mach. Co.  
 Columbu Machine Co. Royce & Pulling.  
 Davis, L. B. Schartz, Peter.  
 Gawler, George A. Standard Machine Co.  
 Greenwood, Jas. & Sons. Standish, Albert.  
 Hoernle, Albert. Weinman, George W.

**PLUMBERS, STEAM AND GAS FITTERS.**

Andrew, J. Klir, C. A.  
 Armstrong, E. B. Pfaff, C. T. & Co.  
 Bell Brothers. Potts, B. D.  
 Bowen, Noah. Schwartz, A.  
 Camp, G. L. Tittley, E.  
 Foster, Frank W. Tuterer & Co.  
 Futrer & Co. Westwater, J. M. & W.  
 Geraghty, M. S. Wilcox, F. W.  
 Halley, Wm. Woolard, W. S.  
 Kelley & Co.

**MISCELLANEOUS.**

Baird Iron Co. .... Mfrs. Iron.  
 Borger Bros. & Co. .... Boiler Makers  
 Brixner, J. A. .... Pattern Maker.  
 Brown, Hinman & Co. .... Mfrs. Agl. Impl'ts.  
 Capital City Car Works.  
 Churchill, Thos. & Co. .... Iron & Steel.  
 Columbus Bolt Works.  
 Columbus Brass & Steam Pipe Works Co.  
 Columbus Bridge & Iron Works.  
 Columbus File Works.  
 Columbus Rolling Mill Co.  
 Driskell, Thos. J. & Co. .... Boiler Makers.  
 Gill Car & Car Wheel Co.  
 Gleeson, M. T. .... Brass Founder.  
 Hayden & Baker. .... Iron.  
 Hutchins, I. G. .... Columbus, Hocking Valley,  
 and Toledo R. R.  
 Kilbourne, Jones & Co. .... R. R. Supplies.  
 Kinnel, Philip. .... Mfr. Edge Tools.  
 Krumm, M. & D. .... Mfrs. Iron Railings.  
 Lauman, L. B. .... Sheet Iron Worker.  
 Maris, Geo. M. & Co. .... Iron & Steel.  
 Miller, T. .... Mfr. Files.  
 Mithoff, H. & Co. .... Iron.  
 Moss & Marshall. .... Iron.  
 Moxahala Iron Co. .... Mfrs. Iron.  
 Murray, Hayden & Co. .... Malleable Iron Works.  
 Nicklaus & McNamara. .... Boiler Makers.  
 Ohio Pipe Co. .... Mfrs. Iron Pipe.  
 Ohio Tool Co. .... Mfrs. Planes.  
 Ohlen, James. .... Mfr. Saws.  
 Reynolds Bros. .... Mfrs. Files.  
 Rhodes, G. W., Pittsburg Cincinnati, & St. Louis.  
 Railroad.  
 Schaad & Sons. .... Coppermiths.  
 Schaeffing, Jacob & Bro. .... Mfrs. Files.  
 Smith, C. W. .... Millwright.  
 Smith & Amann. .... Mfrs. Plows.  
 Styles, B. C. .... Brass Founder.  
 Thuston, J. .... Mfr. Saws.  
 Willson, F. R. & Sons. .... Mfrs. Plows.

**CONNEAUT.**

Ellis, Jno. A. .... Iron Founder.  
 Webb, W. H. .... Machinist.

**CORWIN.**

Lugg, J. S. .... Machinist.

**COSHOCTON.**

Hay, Houston. .... Mfr. Axles & Springs.  
 King, H. .... Iron Founder.  
 McNary, C. A. .... Gas Fitter.

**COVINGTON.**

Brant, Jacob A. .... Machinist.

**COW RUN.**

Gilbert, E. G. .... Machinist.

**CRESTLINE.**

Dyer, G. W. .... Machinist.  
 Wertz, J. W. .... Machinery.

**CUYAHOGA FALLS.**

American Machine Co.  
 Blak-slee Mfg. Co. .... Mfrs. Bolt & Nuts.  
 Conrad Mfg. Co. .... Mfrs. Nuts & Rivets.  
 Cuyahoga Chain Co.  
 Cuyahoga Forge & Iron Co.  
 Dailey, Chas. J. .... Machinist.  
 Falls Rivet Co.  
 Harrison, Chas. F. & Co. .... Mfrs. Rivets.  
 Standish Chain Works.  
 Turner, Vaughn & Taylor. .... Machinists.

**DAYTON.****AGRICULTURAL IMPLEMENT MANUFACTURERS.**

Anderson, R. C. McSherry, D. E. & Co.  
 Burshen, Jno. H. & Co. Parrot, Chas.  
 Champion Plow Works. Pritz & Kuhns.  
 Dodds, John. Stoddard, Jno. W. & Co.  
 Farmers' Friend Mfg. Taylor, B. C. & Son.  
 Company. Woodsum Machine Co.  
 Haltman, W. A. & Co.

**MACHINISTS.**

Bates, H. & Son. Leland, Gillette & Tif-  
 Brownell, J. R. & Co. fany  
 Callahan, W. P. & Co. Marshall, Graves & Co.  
 Hoover, J. P. & M. F. Roberts, Geo. J. & Co.  
 Johnson, J. D. & Bro. Smith, C. N.  
 Johnson, J. R. & Son. Smith, Vaile & Co.

**PLUMBERS, STEAM AND GAS FITTERS.**

Brooks & Kemper. Richmond, Alex.  
 Ellemund, Wm. Russell Bros.  
 Gibbons & McCormick. Stimson, E. A. & Co.  
 Hughes, Daniel L. Ware & Co.

**MISCELLANEOUS.**

Ach, Abraham & Son. .... Coppermiths.  
 Adams, C. W. & Co. .... Mfrs. Files.  
 Altick, Wm. .... Brass Founder.  
 Burney & Smith Mfg. Co. .... Mfrs. R. R. Cars.  
 Bayley, O. W. .... Mfr. Steam Gauges.  
 Benjamin, J. S. .... Mfr. Tools.  
 Boyer & McMaster. .... Mfrs. Stoves.  
 Bretch & Evans. .... Galvanized Iron Works.  
 Brownell, E. H. & Co. .... Boiler Makers.  
 Brownell, J. R. & Co. .... Boiler Makers.  
 Buckeye Iron & Brass Works  
 Burtanger, Israel. .... Iron & Steel.  
 Chadwick & Francisco. .... Mfrs. Iron Railings.  
 Clark & Co. .... Mfrs. Files.  
 Curtis, Chas. W. .... Mfr. Mill Picks.  
 Dayton Brass Works.  
 Dayton File Works.  
 Dayton Malleable Iron Co.  
 Dayton Screw Co.  
 Dobbins, T. C. & Co. .... Iron, &c.  
 Dodds, Jas. .... Machinists' Tools.  
 Dyson, Joseph. .... Mfr. Tools.  
 Gebhart, S. T. & G. A. .... Iron.  
 Graham & Dougherty. .... Boiler Makers.  
 Hagerman, Chris. .... Mfr. Chains.  
 Leland & Dougherty. .... Boiler Makers.  
 Lewis & Co. .... Mfrs. Saws.  
 McHose & Lyon. .... Mfrs. Iron Railings.  
 Neff & Bennett. .... Iron Founders.  
 Oldig, Wm. .... Brass Works.  
 Phoenix Iron Works.  
 Pilate, Geo. R. .... Brass Works.  
 Pryor, E. F. .... Mfr. Tools.  
 Rohr, Geo. F. .... Iron & Steel.  
 Simonds, A. A. .... Mfr. Knives.  
 Soehner & Bro. .... Coppermiths.

**DAYTON—Continued.**

Stilwell & Bierce Mfg. Co. .... Mfrs. Water Wheels.  
 Stout, Elias R. .... Iron.  
 Stout, Mills & Temple. .... Mfrs. Water Wheels.  
 Wroe, Joseph. .... Mfr. Files.

**DEFIANCE.**

Davis & Hoover. .... Gas Fitters.  
 Defiance Machine Works.  
 Heller, Gibson & Co. .... Mfrs. Threshing Machines.  
 Stong & Cheney. .... Machinists.

**DELAWARE.**

Brown & Burnham. .... Founders & Machinists.  
 Delaware Fence & Machine Co.  
 Delaware Foundry Co.  
 Evans, J. C. .... Iron Founder.  
 Munz, J. F. .... Mfr. Agl. Impts.  
 Robinson, Chas. C. .... Iron Founder.

**DELPHOS.**

Pero & Sherman. .... Iron Founders.  
 Welch, Joseph. .... Machinist.

**DELTA.**

Crile, Chas. .... Machinist.  
 Reighard & Reed. .... Machinists.

**DESHLER.**

Suber, A. A. .... Founder and Machinist.

**DEXTER CITY.**

Williams, H. D. & D. H. .... Iron Founders.

**DOYLESTOWN.**

Seiberling, Miller & Co. .... Mfrs. Agl. Impts.

**DRESDEN.**

Adams, J. L. & Co. .... Stove Founders.

**DUNGANNON.**

Kundel, Lazarus. .... Mfr. Agl. Impts.  
 Ream Bros. .... Machinists.

**DUNKIRK.**

Mahan Bros. .... Mfrs. Agl. Impts.

**EAGLEVILLE.**

McNutt, Jos. K. .... Machinist.

**EAST LIVERPOOL.**

Anderson, Jas. .... Plumber.  
 Boyce, A. J. .... Machinist.  
 Burner, John M. .... Plumber.  
 Moffit, J. M. .... Plumber.  
 O'Brien, James A. .... Gas Fitter.  
 Patterson Bros. .... Machinists.  
 Pease, E. J. .... Millwright.  
 Purinton, J. J. & Bro. .... Machinists.

**EAST PLYMOUTH.**

Mann, Wilber E. .... Mfr. Harrows.

**EATON.**

Eidison & De Grott. .... Iron, &c.

**EDON.**

Eyster, S. S. .... Machinist.

**ELMORE.**

Kridler Iron Works. .... Founders.

**ELYRIA.**

Beebe & Hoyt. .... Plumbers.  
 Champ, J. H. & Co. .... Plumbers.  
 Crandall & Lippy. .... Founders & Machinists.  
 Day & Casley. .... Iron Founders.  
 Driesbach, J. E. .... Plumber & Gas Fitter.  
 Elyria Foundry & Machine Co.  
 Elyria Gas Light Co. .... Gas Fitters.  
 Elyria Screw & Tap Co.  
 Elyria Shear Co. .... Mfrs. Cutlery.  
 Griffin Road Machine Co.  
 Hollis, James. .... Iron Founder.  
 Hurlbut, S. G. .... Machinery.  
 Ohio Shear Co. .... Mfr. Cutlery.  
 Tite, James A. .... Machinist.  
 Topliff & Ely. .... Mfrs. Hardware.  
 Western Automatic Machine Screw Co.

**FAYETTE.**

Weaver, Eugene. .... Iron Founder.

**FAYETTEVILLE.**

Connelly, James. .... Machinist.

**FINDLAY.**

Bennett, R. C. & Co. .... Machinery.  
 Coons, Adams & Co. .... Founders & Machinists.  
 Marvin, W. K. & Son. .... Iron Founders.  
 Seymour, C. E. .... Mfr. Agl. Impts.  
 Yocum & Hallowell. .... Iron Founders.

**FLORENCE.**

Thompson, H. G. .... Mfr. Scales.

**FOREST.**

Bainbridge & Chamberlain. .... Machinists.

**FOSTORIA.**

Doe, Evenbeck & Co. .... Founders & Machinists.  
 Doe, Joseph. .... Iron Founder.  
 Fostoria Foundry & Machine Co.  
 Jacobs, T. B. .... Iron Founder.  
 Monnett & Goetz. .... Boiler Makers.  
 Voglesong, W. P. .... Iron Founder.

**FRANK.**

Dick, Joseph. .... Machinist.

**FRANKLIN.**

Eisenminger, Louis. .... Machinist.

**FREDERICKTOWN.**

Cummings & Hosack. .... Bell Founders.  
 Tuttle, S. S. .... Bell Founder.

**FREMONT.**

Beck, G. W. .... Machinery.  
 Blue, D. S. .... Machinist.  
 Cloud, W. H. & Co. .... Mfrs. Steam Pumps.  
 Fremont Harvester Co.  
 Huber & Bocher. .... Machinists' Tools.  
 June, S. A. .... Boiler Maker.  
 June, D. & Co. .... Mfrs. Portable Engines.  
 Lehr Bros. .... Mfrs. Agl. Impts.

**GALENA.**

Hughes & Smythe. .... Mfrs. Agl. Impts.

**GALION.**

Burgert & Dietrich. .... Gas Fitters.  
 Squires & Homer. .... Iron Fdrs. & Engine Builders.

**GALLIPOLIS.**

Enos, Hill & Co. .... Iron Founders.  
 Kling & Dages. .... Iron Founders.

**GANN.**

Black, C. L. .... Iron Founder.

**GANO.**

Wilson, Benj. .... Machinist.

**GARRETTSVILLE.**

Collins & Co. .... Mfrs. Agl. Impts.  
 Udall, B. H. & J. E. .... Iron Founders.

**GENEVA.**

Eagle Lock Co.  
 Enterprise Machine Co.  
 Enterprise Mfg. Co. .... Mfrs. Hardware.  
 Perkins Mfg. Co. .... Machinists.  
 Western Lock Co.

**GERMANTOWN.**

Eimrick, D. P. .... Mfr. Plows.

**GIRARD.**

Corns Iron Co. .... Rolling Mill.  
 Girard Stove Works.

**GNADENHUTTEN.**

Helwig, F. .... Coppersmith.

**GORE.**

Baird Iron Co. .... Mfrs. Iron.  
 Thomas Iron Works. .... Mfrs. Iron.

**GREENTOWN.**

Wise & Acker.....Iron Founders.  
Wise & Wise.....Mfrs. Agl. Impls.

**GREENVILLE.**

Brewer, J. H.....Machinist.  
Dininger, Compton & Mills.....Gas Fitters.  
Eldridge, T. K.....Machinist.  
Rush & Eby.....Mfrs. Agl. Impls.

**GREENWICH.**

Marsh, E. L.....Mfr. Agl. Impls.

**GROVE.**

Nash, E. & Co.....Machinery.

**GUSTAVUS.**

Brainard, A. E.....Machinist.

**HAMDEN JUNCTION.**

Hamden Foundry & Machine Works.  
Vollenweider & Bundy.....Founders & Machinists.

**HAMILTON.**

Bare, Martin.....Mfr. Edge Tools.  
Bentel, Margendant & Co.....Machinists.  
Black & Clauon.....Machinery.  
Blake Steam Gauge Co.  
Burns, P. & Co.....Mfrs. Plows.  
Cope & Maxwell Mfg. Co.....Mfrs. Steam Pumps, &c.  
Davidson & Doellmann.....Boiler Makers.  
Deuscher, H. P.....Iron Founder.  
Fischer, F. J.....Mfr. Hoes.  
Hooven, J. C.....Mfr. Threshing Machines.  
Hooven, Owens & Rentechler Co. (The).....Engine Builders.  
Hughes Cultivator Co.....Mfrs. Plows, &c.  
Hughes, Stephen Mfg. Co.....Mfrs. Mill Machinery.  
Long & Allstatter Co. The.....Mfrs. Agl. Impls.  
Miller, C. C.....Machinist.  
Milliken & Cisle.....Mfrs. Plows.  
Niles Tool Works.  
Ohio Iron Works.  
Phillips, Geo. H.....Plumber.  
Ritchie & Dyer Co. (The).....Machinists.  
Smyers, D. J. T.....Iron & Steel.  
Sohn & Rentchler.....Iron Founders.  
Walker, Geo. L.....Plumber.

**HANGING ROCK.**

Kahn, F. & L Bros.....Iron Founders.

**HANOVER.**

Hollister, Geo.....Iron Founder.

**HARMAR.**

Hall & Blair.....Machinists.  
Harmar Foundry & Machine Co.  
McConnell, Jas. H.....Machinist.  
Putnam, D. Sons & Co.....Machinists.  
Robertson, W. F. & Co.....Iron Founders.  
Stricker, Geo.....Boiler Maker.

**HARRISON.**

Campbell, James.....Machinist.  
Rogers, W. H. & Son.....Iron Founders.

**HARSHMANSVILLE.**

Sprout, Chas.....Machinist.

**HARTFORD.**

Clark, G. W.....Mfr. Agl. Impls.

**HAVANA.**

Owen, H. V.....Machinist.

**HAYESVILLE.**

Rankin, Wm.....Iron Founder.

**HILLSBOROUGH.**

Bell, C. S. & Co.....Mfrs. Bells, &c.  
Hillsboro Shear Mfg. Co.  
Reckly, John.....Gas Fitter.  
Rockhold, N. & Son.....Iron, &c.

**HINCKLEY.**

Dunham, J. W.....Iron Founder.  
Olds, M.....Iron Founder.

**HIRAMSBURG.**

Shadwell, Henry & Son.....Machinists.

**HOMEWORTH.**

Thomas, H. & Co.....Mfrs. Mowers & Reapers.

**HUBBARD.**

Hall, Jesse & Son.....Rolling Mill.  
Hubbard Iron Co.  
Mahoning Valley Iron Co.

**HUDSON.**

Bediant, S. B.....Machinery.

**IRONTON.**

Belfont Iron Works Co.  
Car Wheel Iron Co.  
Etna Iron Works.  
Fisher, J. H. & Co.....Boiler Makers.  
Ironton Mfg. Co.....Mfrs. Agl. Impls.  
Lambert Bros. & Co.....Founders & Machinists.  
Lawrence Iron Works Co.  
Lawton, D. H.....Gas Fitter.  
Mauring, E.....Machinist.  
New York & Ohio Iron & Steel Co.  
Trails, S. J.....Millwright.  
Tyler Hoe & Tool Works.  
Whitman & Snyder.....Stove Founders.

**JACKSON.**

Bentine Bros.....Boiler Makers.  
Bundy Iron Co.  
Globe Iron Co.  
Gray, B.....Iron Founder.  
Kyle, Shotts & Co.....Iron & Steel.  
Mitchell, E. M.....Iron Founder.  
Pickrel & Co.....Iron Founders.  
Tropic Iron Co.

**JEFFERSON.**

Bowman, B. F.....Machinist.  
McCartney & Betch.....Iron Founders.  
McNutt, J. L.....Machinist.

**KENT.**

Carlisle, F. F.....Gas Fitter.  
Zellers & Whitehead.....Machinists.

**KENTON.**

Bloom, Born & Newcomb.....Iron Founders.  
Champion Iron Fence Co.....Founders.  
Humphrey, E. C.....Plumber.  
Kenton Mfg. & Machine Co.  
Mulvey, F. & Son.....Plumbers.  
Nevitt, Chas. E.....Plumber.  
Pfeiffer, Boles & Co.....Iron Founders.  
Sorgon, C.....Mfr. Knives.

**KINGSVILLE.**

Fickinger, Jacob.....Machinist.  
Kingsville Wrought Iron Fence Co.

**KINSMAN.**

Baldwin, George.....Iron Founder.

**LA GRANGE.**

Beuhner Bros.....Iron Founders.

**LANCASTER.**

Eagle Machine Co.  
Hocking Valley Mfg. Co.....Mfrs. Agl. Impls.  
King, George.....Gas Fitter.  
Mayer, Louis.....Plumber.  
Miller, A. G.....Plumber.  
Motherwell Iron & Steel Co.

**LARUE.**

Bechtold, C.....Machinist.  
Long, S. G.....Machinist.

**LEESVILLE.**

Crawford, T. B. & Co.....Iron Founders.

**LEETONIA.**

Cherry Valley Iron Works.  
Grafton Iron Co.  
Leetonia Foundry Co.  
Leetonia Tool Co.  
Thullen, J. C.....Boiler Maker.

**LIBERTY CENTRE.**

Miller, T.....Machinery.

**LIMA.**

Baxter, A. C. & Co.....Plumbers.  
Cook, E. W.....Founder and Machinist.  
Globe Machine Co.  
Lima Iron Fence Co.  
Lima Machine Works.  
Muir, James.....Store Founder.  
Smith, A. N.....Iron Founder.

**LIVERPOOL.**

Noble, Geo. W.....Iron Founder.  
Olds, M.....Iron Founder.

**LODI.**

Hulbinger & Frank.....Mfrs. Threshers.  
Waggoner, H.....Iron Founder.

**LOGAN.**

Belt, Raymond.....Iron Founder.  
Logan Iron Co.  
Winona Iron Co.

**LORAIN**

Stone, W. A., Cleveland, Tuscarawas Valley, &  
Wheeling Railroad.

**LORDSTOWN.**

McCaughty, Jos.....Coppersmith.

**LOUDONVILLE.**

Appleman, Thomas.....Iron Founder.  
Hannon, Wm.....Iron Founder.

**LOUISVILLE.**

Stolte, Fred W.....Iron Founder.

**MCCONNELLSVILLE.**

Buchanan, J.....Millwright.  
Harris, J. W. & Co.....Iron Founders.  
Tanner, David.....Millwright.

**MADISON.**

Genuing, W. H.....Iron Founder.

**MADISONVILLE.**

Brown & Son.....Machinists.

**MALTA.**

Brown Manly Plow Co.

**MANSFIELD.**

Aultman & Taylor Co.....Mfrs. Agl. Impl'ts.  
Barnett, W.....Brass Works.  
Barron, Thos.....Machinist.  
Bliss, Geo. W.....Millwright.  
Bush & Runyan.....Plumbers.  
Harris, Jno. & G. S.....Plumbers.  
Hurst, David.....Millwright.  
Lenn, Richard.....Mfr. Agtl. Impl'ts.  
Leiter, Abraham.....Iron Founder.  
Mansfield Bolt & Nut Co.  
Mansfield Machine Works.  
Mansfield Steam Boiler Works.  
Marshall, John.....Machinery.  
Miller, C. F.....Millwright.  
Ogden, F.....Machinist.  
Reading, Sullivan & Co.....Boiler Makers.  
Smith, Ward.....Plumber.  
Union Foundry & Machine Works.  
Wiler, J. W. & Sons.....Machinists.

**MANTUA.**

Goddard, E.....Iron Founder.

**MARIETTA.**

Adams, D. P.....Machinist.  
Franks, Owen.....Iron Founder & Machinist.  
Nye, A. T. & Son.....Store Founders.

**MARION.**

Harshberger, J. R.....Iron & Steel.  
Huber Mfg. Co.....Mfrs. Agl. Impl'ts.  
La Tourette, A.....Iron Founder.  
Marion Iron Works.

**MARTINS' FERRY.**

Hoyle, E. J. & Bro.....Machinists.  
Jones, J. W. & Co.....Machinists.  
Laughlin Nail Co.....Rolling Mill.  
McKim, Geo. W.....Machinist.  
Mann, Wm.....Iron Founder.

**MARTIN'S FERRY—Continued.**

Martins' Ferry Stove Co.  
Spence, L.....Machinist.  
Spence, Baggs & Co.....Iron Founders.

**MASON.**

Dawson, S.....Mfr. Plows.

**MASSILLON.**

Ayres, B. L.....Mfr. Mill Picks.  
Baylis, Edwin.....Mfr. Agl. Impl'ts.  
Clay, Taylor.....Iron Founder.  
Corey, J. C.....Boiler Maker.  
Corne, Jos. & Son.....Rolling Mill.  
Hess, J. F. & Co.....Iron Founders.  
Hess, Snyder & Co.....Iron Founders.  
Killinger & Co.....Iron Founders.  
Knapp & Dillon.....Plumbers.  
Massillon Novelty Works.....Iron Founders.  
Oehler, H. F.....Coppersmith.  
Russell & Co.....Mfrs. Agl. Impl'ts.  
Snyder, F. H. & Bro.....Machinists.

**MAYFIELD.**

Knapp, S. W. & Sons.....Mfrs. Agl. Impl'ts.

**MECHANICSBURG.**

Mechanicsburg Machine Co.  
Riddle, James.....Plumber.  
Riddle & Gwynn.....Plumbers.

**MEDINA.**

Washburn, A.....Machinist.  
Weber, G. E. & Son.....Iron Founders.  
Wells, D. A.....Machinist.

**MEDWAY**

Lohnes & Stern.....Mfrs. Plows.

**MEIGSVILLE.**

Alexander, W.....Millwright.

**MIAMISBURG.**

Hoover & Co.....Mfrs. Agl. Impts.  
Smith, John C.....Mfr. Agl. Impts.

**MIDDLE CREEK.**

Brown, James.....Millwright.

**MIDDLEFIELD.**

Perkins, W. L.....Iron Founder.

**MIDDLEPORT.**

Barton, H.....Boiler Maker.  
Casey, L. N.....Machinist.  
Grant, E. S.....Machinist.  
Ohio Machine Co.  
Standard Nail & Iron Co.  
Williams, J. F.....Boiler Maker.

**MIDDLETOWN.**

Cunningham & McCurry.....Plumbers.  
Wagner, J. A.....Plumber.

**MILLBROOK.**

Kiester, Geo. & Son.....Millwrights.  
Nichols, Wm.....Millwright.

**MILLERSBURG.**

McDonald & Co.....Iron Founders.

**MINERAL RIDGE.**

Johnson, W. & W. H.....Plumbers.

**MINERVA.**

Pennock Bros.....Car Builders.  
Poorman & Chaffee.....Machinists.

**MINGO JUNCTION.**

Dean, Samuel.....Machinist.  
Junction Iron & Nail Co.

**MONROE.**

Jotter, Peter & Son.....Mfrs. Plows.

**MONROEVILLE.**

Smith, W. E. & Son.....Iron Founders.

**MONTPELIER.**

Wingert, Lewis.....Iron Founder.

**MOUNT VERNON.**

Cooper, C. G. & Co. .... Iron Works.  
 Cooper Mfg. Co. .... Machinists.  
 Roekel Bros. .... Plumbers & Gas Fitters.  
 Rogers, E. .... Iron, etc.  
 Sprague, E. H. .... Machinist.

**MOUNT VERNON FURNACE.**

Campbell, H. & Sons. .... Iron.

**MOXAHALA.**

Moxahala Iron Co.

**NAPOLEON.**

Beard, C. F. & R. .... Iron Founders.  
 James, Ephraim. .... Iron Founder.  
 Reed & Williams. .... Mfrs. Pumps.

**NELSONVILLE.**

Nelsonville Foundry & Machine Co  
 Ogden Iron Co.

**NEPTUNE.**

Hanson, H. H. .... Machinist.

**NEWARK.**

Ashley & Kibler. .... Mfrs. Plows.  
 Daugherty & Dodd. .... Gas Fitters.  
 Hagerstown Agl. Impt. Mfg. Co.  
 Harrison, W. H. .... Baltimore & Ohio R. R.  
 Kibler, Chas. J. & Co. .... Iron Founders.  
 Laird, W. B. .... Machinist.  
 McNamar, J. H. .... Machinery.  
 Newark Machine Co.  
 Scheidler, Rheinhardt. .... Mfr. Steam Engines.  
 Simpson, Thos. .... Iron Founder.  
 Thomas, Jas. E. .... Iron Founder.  
 Tucker, John. .... Plumber.

**NEW BALTIMORE.**

Cole, C. B. .... Iron Founder.

**NEW BERLIN.**

Shook, J. J. .... Millwright.  
 Shook, Wm. .... Millwright.

**NEW BREMEN.**

Lanfersieck, J. F. .... Mfr. Plows.  
 New Bremen Foundry & Machine Co.

**NEW CHAMBERSBURG.**

Varns, H. H. .... Millwright.

**NEW COMERSTOWN.**

Elliott & Clark. .... Machinists.

**NEW GARDEN.**

Liber, Chas. .... Iron Founder.

**NEW LEXINGTON.**

Morehead, T. E. & Son. .... Iron.  
 Woodcock Sons & Co. .... Iron Founders.

**NEW LONDON.**

Arnold, D. J. C. .... Machinist.  
 Healy, C. E. .... Machinist.

**NEW PHILADELPHIA.**

English & Dixon. .... Founders & Machinists.  
 Jones, C. .... Machinist.  
 Kinsely, Oliver K. .... Iron Founder.  
 New Philadelphia Machine Co.  
 Rufer, Samuel. .... Mfr. Mill Picks.  
 Sharp & Son. .... Founders & Machinists.  
 Shrake, F. T. .... Millwright.  
 Smith, Wm. .... Iron Founder.  
 Ward Iron Co. .... Rolling Mill.

**NEW PITTSBURG.**

Snyder, Frank. .... Millwright.

**NEW SPRINGFIELD.**

Wright, R. M. .... Iron Founder.

**NEW VIENNA.**

New Vienna Shear Mfg. Co.

**NILES.**

Carter, John Jr. .... Iron Founder.  
 Church, Geo. & Co. .... Mfrs. Iron.  
 Easthope, C. .... Iron.  
 Falcon Iron & Nail Co.  
 Packard, Smith & Co. .... Mfrs. Iron.  
 Reeves Bros. .... Boiler Makers.  
 Ward, L. B. .... Rolling Mill.  
 Ward Iron Co.

**NORTH AMHERST.**

Kendeigh, J. E. .... Iron Founder.

**NORTH FAIRFIELD.**

Burch, C. A. & Co. .... Mfrs. Plows.

**NORTH ROBINSON.**

Dean, W. P. .... Mfr. Files.

**NORWALK.**

Allen & Guilford. .... Brass Works.  
 Cleveland, W. H. .... Coppersmith.  
 Dunn, Jno. M. .... Boiler Maker.  
 Dunmore, Thos. .... Plumber.  
 Graves & Lyke. .... Machinists.  
 James Lewis. .... Wheeling & Lake Erie R. R.  
 Kuhn, D. B. & Co. .... Boiler Maker.  
 Lentz & Pelker. .... Iron Founders.  
 Lyke, Wm. B. .... Machinist.  
 Morehouse, L. .... Iron Founder.  
 Norwalk Machine Works.  
 Poole, Frank. .... Plumber.  
 Whyler, John G. .... Plumber.

**OAK HARBOR.**

Windisch, J. H. .... Machinist.

**OCEOLA.**

Wert, John. .... Millwright.

**ONTARIO.**

Hackedorn, J. K. .... Machinist.

**ORBISTON.**

Hocking Iron Co.

**ORRVILLE.**

Koppes, Young & Co. Mfrs. Threshing Machines.  
 Techants, A. J. .... Machinist.

**ORWELL.**

Rice, Nash & Taylor. .... Car Builders.

**OTTAWA.**

Daugher, W. S. .... Machinery.

**PAINESVILLE.**

Church & Bros. .... Mfrs. Agri. Impls.  
 Coe & Wilkes. .... Machinists.  
 Gilmore, J. T., & Son. .... Machinists.  
 Hall, Solon. .... Iron Founder.  
 Hulburt & Page. .... Iron Founders.  
 Joughin, John, & Co. .... Plumbers.  
 Leonard, George H. .... Mfr. Plows.  
 Sanford & Blair. .... Stove Founders.  
 Wilder & Co. .... Mfrs. Agri. Impls.

**PAINT.**

Mackerley, Benjamin. .... Machinist.

**PALESTINE.**

Davis, George W. .... Machinery.

**PATASKALA.**

Palmer, N. A. .... Mfr. Agri. Impls.

**PERRYSVILLE.**

McCool & Wilson. .... Iron Founders.  
 Moultrup, Son & Miller. .... Iron Founders.

**PETERSBURG.**

Robenreith & Son. .... Iron Founders.

**PIKETON.**

Burton, C. W. .... Machinist.

**PIQUA.**

Bowdel & Brothers.....Machinists.  
 Enright, W.....Plumber.  
 Fillebrown, L. W.....Mfr. Harrows.  
 O'Ferrall, John.....Mfr. Threshing Machines.  
 Schröder, A. C.....Iron, &c.  
 Stafford, J. W.....Gas Fitter & Plumber.

**PLYMOUTH.**

Fate, Wilson & Freese.....Iron Founders.  
 Piero, Fahs & Co.....Machinists.

**POMEROY.**

Lucke, Frank.....Coppersmith.  
 Pomeroy Machine Co.....Machinists.  
 Siemer, Berthold.....Coppersmith.  
 Turnbull, E.....Coppersmith.  
 Watson, Thomas A. & Co.....Iron Works.

**PORTER.**

Koontz, John.....Machinist.

**PORTSMOUTH.**

Beyerly, W. G.....Steel Works.  
 Bingham, James.....Mfr. Steam Hammers.  
 Burgess Steel and Iron Works.  
 Burt, William.....Plumber.  
 Cory, C. H.....Scioto Valley R. R.  
 Damann & Co.....Iron, &c.  
 Eberhart, H. & Co.....Iron Founders.  
 Harty, William.....Mfr. Springs.  
 Jones, John.....Iron Founder.  
 Neill, John.....Iron Founder.  
 Portsmouth Foundry & Machine Works.  
 Portsmouth Iron & Steel Co.  
 Spry, Richard.....Gas Fitter.  
 Towse, C. H.....Machinist.  
 Watkins, Thomas W.....Plumber.

**RANDOLPH.**

Keller, John F. & Bro. Mfrs. Wood Sawing Mach's.

**RAVENNA.**

Byers, John F.....Machinist.  
 Doig R.....Iron Founder.  
 Haley, William & Co.....Iron Founders.  
 Miller, H. L.....Machinist.

**REPUBLIC.**

Ogden, D. D.....Machinist.  
 Ogden, Frank B.....Iron Founder.

**RICHWOOD.**

Gill Brothers.....Machinists.  
 Monroe, L. G., & Son.....Mfrs. Files.

**RIPLEY.**

Carey, J. C.....Mfr. Plows.  
 Norris & Henry.....Mfrs. Plows.  
 Parker, J. B.....Iron Founder.

**ROCHESTER DEPOT.**

Walker, R. A.....Iron Founder.

**ROCK CREEK.**

Cox, J. L.....Iron Founder.

**ROSCOE.**

Merise, James.....Iron Founder.

**ROSEVILLE.**

Bailey, E. B.....Millwright.

**SAINT LOUISVILLE.**

Martin, J. S.....Millwright.

**SAINT MARY'S.**

Buehler, C.....Machinist.

**SALEM.**

Buckeye Engine Co.  
 Clark, W. J., & Co.....Sheet Iron Worker.  
 Edwards, M. L.....Machinist.  
 Garrigues, N. B.....Machinist.  
 Perry Stove Works.....Stove Founders.  
 Shank, S. L.....Boiler Maker.  
 Sharp, Thomas & Co.....Machinists.  
 Silver & Deming Mfg. Co.....Mfrs. Steam Pumps.  
 Smith, Alfred F.....Metal Spinner.  
 Turner, R.....Plumber.  
 Woodruff & Sons.....Iron Founders.

**SALINEVILLE.**

Edwards, George.....Iron Founder.  
 Smith & Roberts.....Iron Founders.

**SAMANTHA.**

Kelly, Elisha.....Iron Founder.

**SANDUSKY.**

Arend, N., & Sons.....Iron & Steel.  
 Barney & Ferris.....Iron & Steel.  
 Barney & Kilby.....Founders & Machinists.  
 Buyer, Jacob.....Mfr. Files.  
 Cheetham, Geo.....Brass Works, and Plumber.  
 Henderson, J. W.....Boiler Maker.  
 Kolb & Osberghaus.....Machinists.  
 Kranz, F.....Plumber.  
 Kuhn, L. B.....Boiler Maker.  
 Merriam, J. P.....Machinery.  
 Moore, H. G.....Boiler Maker.  
 Sandusky Hoe Co.....Mfrs. Agl. Impts.  
 Sandusky Machine and Agricultural Works.  
 Sandusky Mill Furnishing and Machine Works.  
 Sandusky Plow Works.  
 Sandusky Rolling Mill and Mfg Co.  
 Sandusky Tool Co.  
 Spencer & Townsend.....Gas Fitters.

**SARDINIA.**

Cross & Bros.....Mfrs. Plows.

**SCOVILLE.**

Critz, John.....Iron Founder.

**SHANESVILLE.**

Doershook, Karl, & Domer.....Iron Founders.

**SHARONSVILLE.**

Marshall, C. W.....Mfr. Files.

**SHAWNEE.**

Licking Iron Co.

**SHELBY.**

Trimble, John S.....Iron Founder.

**SIDNEY.**

Hale, John.....Mfr. Agl. Impts.  
 Heiser, John.....Mfr. Plows.  
 Sidney Agricultural Works.  
 Smith, P., Bro. & Co.....Iron Founders.  
 Toy, W. M.....Mfr. Plows.  
 Wagner, John.....Plumber.

**SMITHVILLE.**

Eberle, P. B.....Machinist.

**SOUTH SOLON.**

Adams, A.....Machinist.  
 Wren, John.....Machinist.

**SOUTH TOLEDO.**

Wilder, J. K. & Co.....Mfrs. Agl. Impts.

**SPRINGBORO.**

Miller, Thos. Jr.....Machinist.

**SPRINGDALE.**

Hampton & Gerrard.....Machinists.

**SPRINGFIELD.**

Ambrose, J. R.....Iron Founder.  
 Armstrong Bros.....Boiler Makers.  
 Banroth, W. F.....Machinist.  
 Benjamin, H. & Co.....Iron, &c.  
 Champion Bar & Knife Co.  
 Champion Malleable Iron Co.  
 Coblenz & Myers.....Iron & Steel.  
 Cole, Milton.....Mfr. Chains.  
 Creighton, H. J.....Engine Builder.  
 Diehl, W. W.....Iron & Steel.  
 Enterprise Machine Works.  
 Evans & Foos Mfg. Co.....Mfrs. Agl. Impts.  
 Fawcett, J. J. & Co.....Brass Founders.  
 Flynn, J. L.....Plumber.  
 Hamilton & Co.....Iron, &c.  
 Hartford, M. D.....Mfr. Chains.  
 Hartman, Peter & Co.....Mfrs. Plows.  
 Jardine, N. L.....Plumber.  
 Jones & Winchell.....Machinists.  
 Kinsman, Jno. & Co.....Gas Fitters.  
 Leffel, E. C. & Co.....Machinery.

**SPRINGFIELD—Continued.**

Lugg, John S.....	Machinist.
Malcom, Robert J.....	Gas Fitter.
Mast, Foss & Co.....	Mfrs. Agl. Impts.
Mast, P. P. & Co.....	Mfrs. Agl. Impts.
Nelson & Digon.....	Iron Founders.
Nelson, James.....	Mfr. Plows.
Otto, Ferdinand.....	Coppersmith.
Pitkin, E. P. & Co.....	Brass Founders.
Rinehart, Ballard & Co.....	Mfrs. Agl. Impts.
Robbins & Myers.....	Iron Founders.
Roberts, Amos.....	Boiler Mak-r.
Roberts, B. F.....	Iron Founder.
Roberts, Thomas.....	Boiler Maker.
Schafer, L.....	Machinery.
Spinning, R. T.....	Mfr. Chains.
Springfield Boiler & Sheet Iron Works.	
Springfield Brass Foundry.	
Springfield File Works.	
Springfield Malleable & Grey Iron Co.	
Thomas, J. H. & Sons.....	Engine Builders.
Thomas, Ludlow & Rogers.....	Mfrs. Agl. Impts.
Turnbull, A. E.....	Machinist.
Unglaub, C.....	Mfr. Files.
Warder, Bushnell & Glessner.....	Mfrs. Agl. Impts.
Way, T. R. & Co.....	Machinists.
Whiteley, Fassler & Kelly Co.....	Mfrs. Reapers and Mowers.
Williams, S. J.....	Mfr. Chains.
Willis, R. P. & Son.....	Plumbers.
Willis & Welch.....	Plumbers.
Winchell, James F.....	Mill Machinery.
Wissinger & McCay.....	Brass Founders.
Wolston, Chambers & Burnett.....	Mfrs. Plows.

**SPRING VALLEY.**

Houston, Eli.....	Millwright.
-------------------	-------------

**STEUBENVILLE.**

Dorrance Bros.....	Mfrs. Tools.
Gaston & McBeth.....	Mfrs. Tools.
Hare, F. A.....	Plumber.
Helma, A. M.....	Plumber.
Hislop & Co.....	Iron Founders.
Hislop & McDevitt.....	Machinists.
Jefferson Iron Works.	
Means, James & Co.....	Iron Founders.
Robinson, Irwin & Co.....	Iron Founders.
Sharp & Daniels.....	Iron Works.
Sharp, W. L. & Son.....	Iron Founders.
Steubenville Furnace & Iron Co.	
Warner, E. T.....	Iron Founder.

**STRUTHERS STATION.**

Summers Bros. & Co.....	Mfrs. Sheet Iron.
-------------------------	-------------------

**SUMMERFORD.**

Wilson, J. W.....	Machinist.
-------------------	------------

**TIFFIN.**

Baxter & Brown.....	Plumbers & Gas Fitters.
Canty, John F.....	Boiler Maker.
Kaup, B. & Son.....	Millwrights.
Mathews, C. A.....	Millwright.
O'Brien Bros. Mfg. Co.....	Mfrs. Agl. Impts.
Percy, Louis.....	Boiler Maker.
Tiffin Agricultural Works.	

**TOLEDO.****IRON FOUNDERS.**

Baker, Herbert.....	Smead, I. D. & Co.
Birkhead, P. H.....	Smith & Post.
Bishing, H. & Co.....	Toledo Car Wheel and Cook, A.....
Cook, A.....	Foundry Co.
Morgan & Thayer.....	Toledo Foundry & Machine Co.
Russell, W. C.....	Union Foundry Co.
Russell & Thayer.....	

**MISCELLANEOUS.**

Adams, W. F.....	Iron, &c.
Allen, Chas. H.....	Machinist.
American Car Axle Co.	
Badley, J. W.....	Mfr. Saws & Files.
Birkhead, P. H.....	Machinist.
Bostwick, Brawn & Co.....	Iron, &c.
Breckenridge Tool Co.....	Mfrs. Edge Tools.
Burch, N.....	Mfr. Plows.
Cooke, W. W.....	Machinery.

**TOLEDO—Continued.**

Glendron Iron Wheel Co.	
Gould Bros.....	Plumbers.
Groenwold, John & Son.....	Plumbers.
Haughton & Kneisser.....	Machinists.
Holzemer, Frank.....	Boiler Maker.
Holzemer & Coyle.....	Machinists.
Loeffler & Crane.....	Iron, &c.
McIntyre & Moore.....	Mfrs. Mill Picks.
Middlemier, Walter.....	Mfr. Tools.
Moore & McEwen.....	Plumbers.
Morrell & Co.....	Mfrs. Plows.
Noteman Rotary Engine & Pump Co.	
Peckham, E. G.....	Mfr. Saws & Files.
Post, E. C.....	Machinist.
Raitz & Lawrence.....	Plumbers.
Ricard Bros.....	Boiler Makers.
Rood & Clark.....	Plumbers.
Shaw, Kendall & Co. B. R. & Machinists' Supplies.	
Smith & Halderman.....	Machinists.
Tillinghast & Co.....	Mfrs. Saws.
Toledo Machinery Depot	
Toledo Mower & Reaper Co.	
Toledo Plow & Iron Works.	
Towers, Wm.....	Gas Fitter & Plumber.
Waite & Williams.....	Gas Fitter & Plumber.
Weirs, J. H. F. Toledo, Cincinnati & St. Louis R.R.	
Whitaker, Haynes & Co.....	Iron, &c.

**TRAIL RUN.**

Allen, Robert.....	Machinist.
--------------------	------------

**TROY.**

Bates, L. H.....	Plumber.
Beedle & Kelly.....	Mfrs. Agl. Impts.
Hahn, Gates & Co.....	Mfrs. Iron Fence.
Harter & Houser.....	Iron, &c.
Schilling, David.....	Iron Founder.

**UNITY.**

Welk, E.....	Machinist.
--------------	------------

**UPPER SANDUSKY.**

Ageter, Stevenson & Co.....	Founders & Machinists.
Andrews, J. W.....	Plumber.
Coon, W. S.....	Machinist.
Sanfersieck, A.....	Mfr. Agl. Impts.
Stevenson, J. Monroe.....	Machinist.

**URBANA.**

Anderson, R.....	Iron Founder.
Bechtolt, Geo.....	Machinist.
Borger, H. & Co.....	Mfrs. Agl. Impts.
Crane, M. H. & Co.....	Iron Founders.
Gibbard, J. R.....	Plumber.
Humphrey, A. C.....	Steam Fitter.
Miller, C. A. & Bros.....	Machinists.
Urbana Machine Works.	
Wirtz, Fred.....	Machinist.

**VAN WERT.**

Brittingham, W. F.....	Plumber.
Strother, A. R.....	Machinist.

**VERSAILLES.**

Schröder, A. C.....	Iron, &c.
---------------------	-----------

**VIENNA.**

Humason, J. A.....	Mfr. Agl. Impts.
--------------------	------------------

**WADSWORTH.**

Chandler, S. P.....	Machinist.
Kramer, F. W. & Co.....	Mill Machinery.

**WALHONDING.**

Dorsey, W. E.....	Iron Founder.
-------------------	---------------

**WAPAKONETA.**

Wirts & Bierlien.....	Machinists.
-----------------------	-------------

**WARREN.**

Douglass Machine Works.	
Freeman, J. J.....	Machinist.
Mes-er, M. O.....	Mfr. Agl. Impts.
Packard, Smith & Co.....	Mfrs. Iron.
Reed, James & Sons.....	Stove Founders.
Reid, Geo. H. & Co.....	Machinists.
Spangler, Pendleton & Co.....	Machinists.
Westlake, C. & Co.....	Rolling Mill.

**WASHINGTON.**

Jenny, Moore & Co.....Iron Founders.  
 Jenny & Manning.....Iron Founders.  
 Martin & Brady.....Plumbers.  
 Miller, Frank & Co.....Founders & Machinists.  
 Roberts, Amos.....Boiler Maker.

**WAYNESBURG.**

Jones, Robert.....Iron Founder.

**WAYNESVILLE.**

Lugg & Cook.....Machinists.

**WELLINGTON.**

Bennett Bros. & Co.....Founders & Machinists.

**WELLSVILLE.**

Alexander, Hugh.....Iron Founder.  
 Anderson, R. C. & Co.....Plumbers.  
 Cochran, Curtis.....Millwright.  
 Menough, Geo. W.....Iron Founder.  
 Roberts, W. W.....Boiler Maker.  
 Stevenson & Co.....Founders & Machinists.  
 Urie, John & Co.....Machinists.  
 Wellsville Plate & Sheet Iron Co.

**WEST BEDFORD.**

Watson, James.....Machinist.

**WEST LAFAYETTE.**

Wirts, Samuel.....Millwright.

**WEST LEIPSI.**

Prentiss, T. W.....Iron Founder.  
 Rockwell, H. D.....Iron Founder.

**WEST LIBERTY.**

Hannum, Stephen.....Millwright.

**WEST MILTON.**

Hayner, Wm.....Mfr. Iron Fence.

**WEST UNITY.**

Moore, Geo. H.....Iron Founder.

**WHITE HOUSE.**

Rackstraw, J. & Son.....Mfrs. Agl. Implts.

**WHITE SULPHUR.**

Kuhns, Geo. M.....Machinist.

**WILLIAMSBURG.**

Park, John.....Machinist.

**WILLOUGHBY.**

Jenkins, J., & Son.....Iron Founders.  
 Willoughby Mfg Co.....Mfrs. Threshing Machines.

**WILMINGTON.**

Fulton, Crane & Peters.....Iron, &c.

**WILMOT.**

Johnston, W. M., & Co.....Mfrs. Agl. Implts.

**WINONA.**

Kelly, N. W.....Machinist.

**WINONA FURNACE.**

Winona Iron Co.

**WINTERSVILLE.**

Bairn, W. V.....Iron, &c.

**WOOSTER.**

Barrett, B., & Son.....Engine Builders.  
 Kauk, J. H.....Mfr. Agl. Implts.  
 Miller, Jacob D.....Mfr. Plows.  
 Redinger, R. S., & Co.....Founders & Machinists.  
 Rogers, E.....Plumber.  
 Tiesche & Bro.....Plumbers.

**WYNANT.**

Killian, D.....Machinist.

**XENIA.**

Jennings & North.....Plumbers & Gas Fitters.  
 Keller, Adolph.....Plumber.  
 Shawnee Agricultural Works.  
 Shu z, G., & Son.....Engine Builders.  
 Trader & Co.....Iron, &c.

**YELLOW SPRINGS.**

Carr, William, & Son.....Mfrs. Threshing Machines.

**YOUNGSTOWN.**

Andrews Bros. & Co.....Iron, &c.  
 Andrews & Hitchcock.....Iron, &c.  
 Arms, Baldwin & Co.....Mfrs. Iron & Spikes.  
 Arms, Bell & Co.....Mfrs. Bolts & Nuts.  
 Bonnell, Botsford & Co.....Iron, &c.  
 Booth, Miller & Co.....Iron Founders.  
 Brown, Bonnell & Co.....Rolling Mill.  
 Cartwright, McCurdy & Co.....Rolling Mill.  
 Fowler, Stambaugh & Co.....Iron, &c.  
 Hennessy, Jno.....Boiler Maker.  
 Henry, Jno.....Boiler Maker.  
 Mahoning Valley Iron Co.  
 Milliken, Boyd & Co.....Car Builders.  
 Niles Iron Co.....Rolling Mill.  
 Pollock, W. B., & Co.....Boiler Makers.  
 Rudge, W. S., & Co.....Plumbers.  
 Scheibel, Louis B.....Plumber.  
 Squire, Paine & Co.....Plumbers.  
 Stambaugh, Thompson & Co.....Plumbers.  
 Tod, W. & Co.....Iron Founders.  
 United States Iron Co.  
 Vinton, Jno. A.....Brass Founder.  
 Werner, William.....Millwright.  
 Wick, Adams & Co.....Mfrs. Bolts, &c.  
 Youngstown Malleable Iron Co.  
 Youngstown Mfg. Co.....Brass Founders.  
 Youngstown Rolling Mill Co.

**ZANESVILLE.**

Blandy, F. J. L.....Iron Founder.  
 Brown Mfg. Co.....Mfrs. Agl. Implts.  
 Dietrich, J. P.....Plumber.  
 Dockery, Chas.....Brass Founder.  
 Duvall & Co.....Engine Builders.  
 Ebert, O.....Machinist.  
 England Bro. & Dugan.....Iron Founders.  
 Fillmore, Casel & Co.....Iron, &c.  
 Fillmore, E. E., & Co.....Iron, &c.  
 Ford, W. D.....Plumber.  
 Griffith & Wedge.....Machinists.  
 Gurl-y, J. B.....Coppersmith.  
 Haas, Chas. H.....Plumber.  
 Harton, D., & Sons.....Iron Founders.  
 Huff, E. S., & Son.....Mfrs. Plows.  
 Jones & Abbott.....Stove Founders.  
 Le Roy & Stemm.....Gas Fitters.  
 McCormick, G. W.....Coppersmith.  
 Mason, A. M., & Co.....Iron Founders.  
 Mitchell, F. I.....Millwright.  
 Ohio Iron Co.....Rolling Mill.  
 Printz, J. H., & Son.....Gas Fitters.  
 Ratliff & Cunningham.....Iron Founders.  
 Roady, Wm.....Iron Founder.  
 Roedel, Henry.....Mfr. Files.  
 Roedel & Bro.....Gas Fitters.  
 Shinnick, Woodside & Gibbons.....Iron Founders.  
 Widney, Alex.....Mfr. Scales.

**ZUCK.**

Baumgartner, John.....Millwright.

**OREGON.****ALBANY.**

Cherry, A. F. & Son.....Founders & Machinists.  
 Cherry & Parker.....Founders.

**ASTORIA.**

Ardt & Ferchen.....Machinists.  
 Astoria Iron Works.

**CANYONVILLE.**

Houser, L.....Machinist.

**EAST PORTLAND.**

Payne, Frank.....Iron Founder.

**INDEPENDENCE.**

Rowe, E.....Machinist.



**PORTLAND.**

Barrett, J. .... Plumber.  
 Born, F. .... Wood Working Machinery.  
 Brandt, A. .... Portland & Oregon R. R.  
 Brandt & Leck. .... Galvanized Iron.  
 Campbell, A. .... Iron Works.  
 Case, J. I., Threshing Machine Co.  
 Church, A. .... Plumber.  
 Dilg, H. W. .... Machinist.  
 Donnerberg, J. .... Gas Fitter.  
 Druck, W. .... Machinist.  
 Gregory, H. P. & Co. .... Machinery.  
 Henly, Wm. .... Coppersmith.  
 Honeyman, Jno. & Co. .... Iron Founders.  
 Johnston, T. J. .... Plumber.  
 McGee & Richet. .... Iron Founders.  
 Moore, D. M. .... Brass Works.  
 Oregon Stove Foundry.  
 Richet, I. & Co. .... Iron Founders.  
 Seymour, Sabin & Co. Mfrs. Threshing Machines.  
 Shea, J. F. .... Plumber.  
 Smith Bros. & Watson. .... Iron Founders.  
 Tatum & Bowen. .... Machinery.  
 Varwig, Thomas. .... Plumber & Gas Fitter.  
 Williamette Iron Works.

**ROSEBURG.**

Brennell & Zimmerman. .... Iron Founders.

**SALEM.**

Drake, B. F. .... Iron Founder.  
 Maury, T. A. .... Plumber & Gas Fitter.  
 Patterson & Davol. .... Iron Founders.  
 Riggs, D. L. .... Machinist & Iron Founder.

**THE DALLES.**

Fitzgerald, E. P. .... Iron & Steel.  
 Rogers & Skibbe. .... Iron Founders.  
 Skibbe, F. W. L. .... Machinist.

**WOODBURN.**

Remington, D. L. .... Iron Founder.

**PENNSYLVANIA.**

**AIKEN.**

Ireland & Hughes. .... Machinists.

**ALBRIGHTSVILLE**

Deppey, H. J. .... Millwright.

**ALBURTIS.**

Mayberry, Reuben. .... Millwright.  
 Thomas Iron Co.

**ALDENVILLE.**

Buntling, Mrs. T. U. .... Machinist.  
 Staple, F. M. .... Machinist.

**ALEXANDRIA.**

Varner, W. S. .... Millwright.

**ALLEGHENY CITY.**

**IRON FOUNDERS.**

Anderson & Potter. .... Irwin, W. H.  
 Anschutz, H. & Co. .... Lindsey & McCutcheon.  
 Brewer, McCrea & Co. .... Livingston & Co.  
 Curlin, Thos. .... Maxwell, Silliman and  
 Crea, Graham & Co. .... Evans.  
 De Haven & Co. .... Riddle, W. H.  
 Gill, Jno. L., Jr.

**MACHINISTS.**

Anderson & Potter. .... Hutchinson & Alexander.  
 Arnott & Torrance. .... Osborne, S. J.  
 Chaplin & Lantz. .... Rogers, Chas. M.  
 Farnan, Henry. .... Steuler, Philip.  
 Gibson & Riddle. .... Young, John S.

**PLUMBERS, STEAM & GAS FITTERS.**

Anderson, James. .... Bradshaw, Robt. J.  
 Apfelheimer, G. .... Bridge, E.  
 Arthurs, Samuel. .... Brown, Thomas.  
 Bonner & Malley. .... Bruckmiller, Joseph.  
 Bourne, Edward. .... Buerkle, C. M.  
 Bowman, James. .... Erwin, D. P.

**ALLEGHENY CITY—Continued.**

**PLUMBERS, STEAM & GAS FITTERS.**

Gray, F. J. .... Rowbottom, Wm.  
 Hay, J. .... Sauer, W. W.  
 Keown, Wm. .... Shirk, J. C.  
 McKissock, Samuel. .... Sulzer, Jno. R.  
 Manz & Bro. .... Tate, W., Jr.  
 Pratt, H. M., Jr. .... Tate & Munden.  
 Reed, W. L. .... Weinz, Christian.  
 Rippey, M. .... Whitehead, Stewart H.

**MISCELLANEOUS.**

Alcott, S. H. .... Mfr. Files.  
 Alker & Cromlish. .... Mfrs. Bolts & Rivets.  
 Enterprise Lock Works.  
 Fleege, J. .... Gun Works.  
 Gill, Jno. L., Jr. .... Car Builder.  
 Haslett, Frank M. & Co. .... Mfrs. Bolts, Nuts, &c.  
 Lang & Lauster. .... Mfrs. Britannia Ware.  
 Liggett Spring & Axle Co. ....  
 McKinney Mfg. Co. .... Mfrs. Hinges.  
 Manchester Iron & Steel Co.  
 Minnemeyer, H. W. & Co. .... Malleable Iron Works.  
 Moorhead Bro. & Co. .... Mfrs. Iron.  
 Nellis, McIntire & Co. .... Mfrs. Agl. Steels & Irons.  
 Perrott, Chas. .... Sheet Iron Worker.  
 Rankin, H. P. .... Mfr. Tools.  
 Reed & Thaw. .... Mfrs. Steel.  
 Redrup, C. G. .... Boiler Maker.  
 Smith, Sutton & Co. .... Steel Works.  
 Spang, Calant & Co. .... Iron Works.  
 Spang Steel & Iron Co.  
 Standard Mfg. Co. .... Mfrs. Hollowware.  
 Stokes, Jno. .... Mfr. Files.  
 Wakeman, Cephas. .... Mfr. Nails.  
 Webb Tool Co. .... Mfrs. Drills.  
 Woodhouse, H. .... Mfrs. Sheet Iron.

**ALLEN.**

Plank, A. W. .... Mfr. Plows.

**ALLENSVILLE.**

Lashell, Robt. C. .... Plumber.

**ALLENTOWN.**

Addis, Joseph H. .... Plumber.  
 Albright's, Sons & Co. .... Mfrs. Gas Pipe.  
 Allentown Iron Co.  
 Allentown Malleable Iron Works.  
 Allentown Rolling Mill.  
 Barber, Joseph. .... Machinist.  
 Barber, Keiser & Co. .... Iron Founders.  
 Birchall & Parton. .... Plumbers, Gas & Steam  
 Fitters.  
 Bohlen, E. H. & Bro. .... Machinists.  
 Cole & Heilman. .... Boiler Makers.  
 Evans, E. B. .... Plumber & Gas Fitter.  
 Fisher, H. H. .... Iron Founder.  
 Gough, Edward. .... Brass Founder.  
 Gruele, Wm. .... Mfr. Files.  
 Ibach, Gideon. .... Machinist.  
 Kilian, L. A. .... Mfr. Files.  
 Knauss & Grammes. .... Machinists.  
 Koch, Jonathan W. .... Mfr. Agl. Impts.  
 Lehigh Iron Co.  
 Lehigh Valley Spike Works.  
 Leudenslager, H. S. .... Mfr. Mill Picks.  
 Mosser, W. F. .... Mfr. Turbine Water Wheels.  
 Nadig, Henry & Bro. .... Machinists.  
 Pretz, P. S. .... Plumber.  
 Rhoda, Matthew. .... Boiler Maker.  
 Shafer & Willenbuecker. .... Plumbers.  
 Siegfried, Wm. .... Millwright.  
 Solidad, Reuben. .... Mfr. Iron Railing.  
 Taylor, Wm. H. & Co. .... R. R. Supplies.  
 Wannamaker & Heiney. .... Machinists.  
 Willenbuecher, Lewis. .... Plumber.  
 Wilson, J. W. & Son. .... Spike Works.  
 Wolf, A. N. .... Millwright.  
 Wolfertz, C. F. .... Mfr. Cutlery.  
 Young, C. F. .... Plumber.

**ALSACE.**

Clymer & Bros. .... Mfrs. Iron.  
 Miller, H. A. .... Millwright.

**ALTOONA.**

Altoona Car Wheels.  
Altoona Iron Co.  
Clawson, C. H. & Co.....Plumbers.  
Colclesser Bros.....Mfrs. Edge Tools.  
Ely, T. N.....Pennsylvania, R. R.  
Foster, Jno.....Plumber.  
Molloy, Frank.....Plumber.  
Pennsylvania R. R. Machine Works.  
Stewart, G. M.....Plumber.  
Stone, Geo. M.....Plumber.  
Vaughn, W. R.....Plumber.  
Wylie, D.....Plumber.

**ALUM BANK.**

Hann, S. W.....Iron Founder.

**ANTES FORT.**

Grove, Masters & Co.....Mfrs. Agl. Impts.

**APOLLO.**

Apollo Iron Works.....Rolling Mill.  
Kettering, Casper.....Iron Founder.  
Laufman & Co.....Mfrs. Iron.

**ARCHBOLD.**

Bishop Bros.....Plumbers.

**ARDMORE.**

Croft, Samuel.....Rolling Mill.  
Hampton, Chas.....Mfr. Edge Tools.

**ARMAGH P. O.**

Brendlinger, D. W.....Millwright.  
Shoup, Jno.....Mfr. Threshing Machines.  
Tomb, Wm. & Son.....Iron Founders.

**ASHLAND.**

Garner, Joseph W.....Iron Founder & Machinist.  
Garner, L. P. & Co.....Iron Works.  
Goyno Bros.....Iron Works.  
Phillips & Davis.....Boiler Makers.  
Yost, Lewis.....Gas Fitter.

**ASHLEY.**

Braston, L. C.....Central R. R. of New Jersey.

**ATGLEN.**

Atglen Axle & Iron Mfg. Co.  
Chaifant Mfg. Co.....Iron Founders.  
Goodman, Chas. & Bro.....Iron Works.

**ATHENS.**

Shoemaker, W. A.....Millwright.  
Thomson & Kucher.....Iron Founders.

**AUBURN.**

Kaufman, M. & H. W.....Mfrs. Iron, etc.

**AVONDALE.**

Chambers, R. B.....Plumber.  
Miller & Anderson.....Machinists.  
Watson, Carlisle & Miller.....Machinists.

**BACHMANVILLE.**

Breinser, J. C.....Mfr. Agl. Impts.

**BAINBRIDGE.**

Strock, Solomon.....Millwright.

**BALDWIN STATION.**

Pennsylvania Steel Co.

**BANGOR.**

Flory & Co.....Iron Founders.  
Raisner & Gulick.....Machinists.

**BARNHART'S MILLS.**

Buffalo Boiler Works.  
Campbell & Murphy.....Machinists.  
Dale & Larkin.....Machinists.  
Hughes & O'Brien.....Machinists.  
McNevin Bros.....Boiler Makers.  
White, Mrs. W. H.....Boiler Maker.

**BATH.**

Barber, Stephen D.....Machinist.  
Hirst, Jacob W.....Millwright.  
Smack & Knauss.....Machinists.

**BAUMSTOWN.**

Kline, J. R.....Iron Founder & Machinist.  
Triewel, Jno.....Iron Founder & Machinist.

**BAXTER.**

Baxter, R. J.....Millwright.

**BEAR GAP.**

Wynn, Wm.....Millwright.

**BEAVER FALLS.**

Beaver Falls Car Works Co.  
Beaver Falls Cutlery Co.  
Beaver Falls Metal Works.  
Beaver Falls Rolling Mill.  
Beaver Falls Steel Works.  
Beaver Falls Variety Works.....Brass Founders.  
Brown Bros.....Mfrs. Plows.  
Chandley, W. H. & Bro.....Plumbers.  
Co-operative Foundry Ass'n.....Mfrs. Stoves, etc.  
Emerson, Smith & Co.....Mfrs. Saws.  
Hubbard, Blakewell & Co.....Mfrs. Axes & Hoes.  
Levi, Chas.....Iron.  
Lindsay & Brady.....Brass Founders.  
McKee, Anderson Steel Co.  
Myers, H. M. & Co.....Mfrs. Shovels.  
Pittsburg Hinge Works.  
Western File Co.  
White, T. Sidney.....Machinist.  
Wolf, A. F.....Stove Founder.

**BEAVER SPRINGS.**

Long, R. R.....Iron Founder.  
Stedler, G. & Son.....Iron Founders.

**BEAVERTOWN.**

Specht & Son.....Iron Founders.  
Stettler, Geo.....Iron Founder.

**BECHTELSVILLE.**

Solomon, Solomon S.....Millwright.

**BEDFORD.**

Hawkins, Geo. C.....Plumber.  
Shires & Jordan.....Iron Founders.

**BEECH CREEK.**

Lose, Daniel.....Iron Founder.  
Quay, James R.....Millwright.  
Strong, S.....Iron Founder.

**BELFAST.**

Kemmer, Daniel.....Iron Founder.

**BELLEFONTE.**

Barnes, J. W.....Plumber.  
Bayard, Geo. A.....Iron Founder.  
Bellefonte Rolling Mill.....Nails.  
Derr, Daniel.....Gas Fitter.  
Duncan, Wm. P. & Co.....Iron Founders.  
Galbraith, Wm.....Plumber.  
Gordon & Landis.....Machinery.  
Henderson, James.....Iron.  
Lawson, Wm.....Car Works.  
Mann, J. F.....Mfr. Edge Tools.  
Valentines & Co.....Iron Works.  
Williams, Mark.....Millwright.

**BELLE VERNON.**

Mackey, W. P.....Iron Founder.

**BELLEVILLE.**

Harman, W. B.....Iron Founder.

**BELLWOOD.**

Glasgow, Turner.....Millwright.  
Noel, Daniel.....Millwright.

**BENNETT.**

Graff, Bennett.....Rolling Mill.

**BENTLEYVILLE.**

Scott, Henry.....Machinist.

**BENTON.**

Fulmer, J. D.....Millwright.  
Fulmer, C. P.....Millwright.

**BERKS.**

Wister, Fisher & Fox.....Rolling Mill.

**BERLIN.**

Krissenger, C.....Iron Founder.  
Philson Iron and Coal Co.

**BERNVILLE.**

Hetrick, John.....Iron Founder.

**BERRYSBURG.**

Snyder, J. D.....Iron Founder.

**BERWICK.**

Berwick Rolling Mill Co.  
Freas, H. L. & W. B.....Iron Founders.  
Jackson & Woodin Mfg. Co.....Mfrs. Car Wheels.  
Jackson Bros. & Crispin.....Iron Works.  
Kinkade, A.....Plumber.

**BERWYN.**

Trego & Anderson.....Plumbers.  
Weaver, C. A.....Plumber.

**BEST.**

Peters, F. N. & Bro. Iron Founders & Machinists.

**BETHANY.**

Thayer, Horace.....Millwright.

**BETHLEHEM.**

Beckel, C. W.....Iron Founder & Machinist.  
Bethlehem Iron Co.  
Brunner & Knauts.....Machinists.  
Krause, F. J.....Plumber.  
Lehigh Mfg. Co.....Shovels, Spades, &c.  
Lehighton Stove & Mfg. Co.  
Lehman, B. E.....Brass Founder.  
Reck, George H.....Plumber.  
Rice, Thos. J.....Plumber.  
Snyder, R. H.....Lehigh Valley R. R.  
Shive Governor Works.....Machinists.

**BIG SHANTY.**

Walker, W. C., & Co.....Machinists.

**BINKLEY'S BRIDGE.**

Harnish, B. W.....Iron Founder.

**BIRD-IN-HAND.**

Meyers, Daniel.....Machinist.

**BIRDSBOROUGH.**

Brooke, E. & G., Iron Co.....Rolling Mill, &c.

**BISMARCK.**

Enck, J. M.....Mfr. Edge Tools.

**BLACK LICK.**

Cribbs, Jacob.....Millwright.

**BLAIRSVILLE.**

Alters, James O.....Plumber.  
Tittle, C. L.....Iron Founder.

**BLANDON.**

Malden Creek Iron Co.

**BLOOMSBURG.**

Bloomsburg Iron Co.  
Brower, E. B.....Plumber.  
Galligan, C. O.....Plumber.  
Harman & Hassert.....Machinists.  
Hess, S. M.....Iron Founder.  
Lockard, G. M. & J. K.....Car Builders.  
Rollins, Holmes & Schuyler.....Plumbers.  
Sharpless, B. F.....Iron Founder.

**BLOSSBURG.**

Bonny, Peres.....Tioga R. R. Car Works.  
Moores, Thomas J.....Iron Founder.

**BOALSBURG.**

Sellers, Wm. L., & Son.....Iron Founders.

**BOILING SPRING.**

Ahl, C. W., & Son.....Mfrs. Iron.

**BOYERSTOWN.**

Brendlinger & Co.....Iron Founders.  
Schlegel, Daniel.....Machinist.  
Steel Ore Co.  
Yahn, Jacob B.....Plumber.

**BRADDOCK.**

Carnegie Bros.....Steel Works.  
Edgar Thompson Steel Co.  
McVey & Walker.....Iron Founders.

**BRADFORD.**

Ball Bros. & Belknap.....Mfrs. Edge Tools.  
Bayne, S. G.....Boiler Maker.  
Bodine & Walker.....Sheet Iron & Metal Workers.  
Borchert, A. L., & Co.....Steam Fitters.  
Boughton, R. H., Jr.....Boiler Maker.  
Bovaird & Seyfang.....Iron Founders & Machinists.  
Bradford Gaslight & Heating Co.  
Bradley & Duff.....Machinists.  
Brown & Norris.....Machinists.  
Chambers & Grainger.....Plumbers.  
Clark & Clement.....Plumbers.  
Conley & Bro.....Boiler Makers.  
Dempsey, Florence.....Boiler Maker.  
Dempsey, J.....Boiler Maker.  
Donely & Anderson.....Iron Founders.  
Donohue & Clark.....Plumbers.  
Edwards, W. H., & Co.....Machinists.  
Farrar & Treits.....Machinery.  
Fone, Geo.....Boiler Maker.  
Geary, Michael.....Boiler Maker.  
Gibbs & Sterrett Mfg. Co.....Engine Builders.  
Ireland & Hughes.....Machinists.  
Jerecki Mfg. Co.....Brass & Iron Works.  
Murray & Wolf.....Plumbers.  
Phillips, J.....Boiler Maker.  
Robertson, Wm.....Machinist.  
Rose, Geo. W.....Machinist.  
Shearer, T. M., & Co.....Machinists.  
Ver Valin, R. M.....Machinery.  
Walter, Wm. M.....Machinist.

**BREADYSVILLE.**

Barton Mfg. Co.....Mfrs. Agrl. Impls.

**BREAKNECK P. O.**

Vaudling, Andrew D.....Iron Founder.

**BRICKERVILLE.**

Coleman's R. W. Heirs.....Iron.

**BRIDGEPORT.**

Andrews, Joel W.....Mfr. Agl. Impls.  
Swan, Wm.....Iron Founder.

**BRIDGE VALLEY.**

Ryan, Isaac T.....Millwright.

**BRISTOL.**

Bristol Rolling Mill Co.  
Bristol Stove Works.  
Collins, Arthur F.....Plumber.  
Harkins, Thos. B.....Iron Founder.  
Middleton, T. K.....Plumber.  
Noyegold, Scheide & Co.....Rolling Mill.  
Snedaker, R.....Machinist.  
Stone, G. S., & Son.....Plumbers.

**BROCKWAYVILLE.**

Rochester & Pittsburgh Coal & Iron Co.

**BROOKVILLE.**

Boyer, J. W.....Saw Works.  
English, Daniel, & Son.....Iron Founders.  
English, Edwin.....Iron Founder.  
Jenks, W. H.....Machinist.  
Wasson & Verstine.....Iron Founders.

**BROWNSVILLE.**

Herbertson, John, & Co.....Iron Founders.  
Magee & Co.....Mfrs. Iron.  
Vorhes, Samuel.....Coppersmith.

**BRUIN.**

Towhill Bros.....Machinists.

**BRUNNERSVILLE.**

Wissler, Aaron.....Iron Founder & Machinist.

**BRYN MAWR.**  
Greaves, E. H. ....Plumber.

**BUFFALO RUN.**  
Mattern, J. B. ....Iron Founder.

**BUTLER.**  
Bauer, Wm. & Henry.....Machinists.  
Burtner, Jeff.....Plumber.  
Bryson, R. R.....Millwright.  
Campbell, J. G. & Wm.....Iron Founders.  
Cuthbert, A.....Machinist.

**CALIFORNIA.**  
King, J. W.....Iron Founder.

**CALN.**  
Beale, J. & Bros.....Rolling Mill.

**CANAL.**  
Lupher, H.....Machinist.

**CANADENSES.**  
Lewis, Laban.....Brass Worker.

**CANNONSBURG.**  
Cannonburg Iron Co.  
Denny & Malcolm.....Machinery.

**CANTON.**  
Mitchell, Jas. M.....Iron Founder & Machinist.  
Mitchell & Warriner.....Mfrs. Plows.

**CARBONDALE.**  
Bunnell Mfg. Co.....Mfrs. Plows.  
Gelden, Frederick T.....Machinist.  
Lindsay & Early.....Iron Founders.  
Lister, Thos.....Gas Fitter.  
Van Bergen & Co.....Stove Founders.

**CARLISLE.**  
Ball, J. G.....Gas Fitter.  
Brown, Long & Co.....Iron Founders & Machinists.  
Campbell, James.....Gas Fitter.  
Carr, H. G.....Mfr. Agt. Impts.  
Carlisle Mfg. Co.....Car Builders.  
Fredericks, Theo. C.....Plumber & Gas Fitter.  
Gardner, F. & Son.....Iron Founders.  
Goekeler, Theo. G.....Plumber.  
Kutz, Gideon.....Mfr. Agt. Impts.

**CARMICHAELS.**  
Eicher, Jacob F.....Iron Founder.

**CARRICK FURNACE.**  
Bland & Spang.....Machinists.

**CARROLL.**  
Borner, J. D.....Machinist.

**CARVERSVILLE.**  
Shaw, Henry.....Machinist.

**CASHTOWN.**  
Biesecker, Frank.....Millwright.

**CASSVILLE.**  
Hamilton, David.....Millwright.

**CATASAUQUA.**  
Catasaqua Mfg. Co.....Rolling Mill.  
Crane Iron Co.  
Davies & Thomas.....Iron Founders.  
Evans, T. E.....Catasaqua & Fogelsville R. R.  
Frederick, S. J.....Iron Founder & Machinist.  
Johnson, Geo.....Steel Rolling Mill.  
Lehigh Car Wheel & Axle Works.  
McKee & Fuller.....Mfrs. Car Wheels & Axles.  
Millson, Daniel.....Boiler Maker.  
Union Foundry & Machine Co.

**CATAWISSA.**  
Fredericks, S.....Iron Founder.  
Guinn, Geo.....Mfr. Plows.

**CEDAR SPRINGS.**  
Wetmore, C. I. & Co.....Mfrs. Axes.

**CENTRAL.**  
Hess, H. C.....Machinist.

**CENTRE HALL.**  
Van Pelt & Shoop.....Iron Founders.

**CENTRE SQUARE.**  
Conard, Jacob.....Mfr. Plows.

**CENTREVILLE.**  
Bingham & Sons.....Iron Founders.

**CHAMBERSBURG.**  
Anthony, W. P.....Machinery.  
Burkhart, C. & Co.....Iron Works.  
Eyster, N. F.....Plumber.  
Gelwick, John F.....Machinery.  
Gilbert, Calvin.....Machinist.  
Hull, A. S.....Cumberland Valley R. R.  
Hunter & Springer.....Iron Works.  
McGrath, A. C.....Plumber.  
Reinick, Jacob.....Plumber.  
Ryder & Co.....Mfrs. Portable Heaters.  
West, John E.....Millwright.  
Wood, T. B. & Co.....Iron Founders.

**CHELTENHAM.**  
Rowland, T. & Sons.....Mfrs. Shovels.

**CHERRY TREE.**  
Mehaffy, Kimports & Co.....Iron Founders.

**CHERRYVILLE.**  
Dieter, Geo. B.....Iron Founder.

**CHESTER.**  
Baker & Culbert.....Plumbers.  
Barrowclough E.....Plumber.  
Black, H. B.....Mfr. Edge Tools.  
Boeswald, F.....Plumber.  
Bolton, B. F.....Plumber.  
Bottomlev, Geo. & Son.....Machinery.  
Chester Rolling Mill Co.  
Chester Steel Castings Co.  
Combination Steel & Iron Co.  
Delaney, Michael.....Plumber.  
Dutton, John.....Mfr. Edge Tools.  
Eureka Cast Steel Co.  
Eyre, H. C. & Co.....Machinists.  
Gartside & Turner.....Plumbers & Gas Fitters.  
Green, Wm. H.....Brass Founder.  
Hall, Thos. S.....Iron Works.  
Hatton, M. S.....Plumber.  
Marlor, Robt.....Plumber & Gas Fitter.  
Rigby, Samuel.....Machinist.  
Roach, John & Son.....Iron Ship Builders & Engine Works.  
Sparks, E. D. & Co.....Iron & Steel.  
Trout, Wm.....Machinist.  
Weed & Clafin.....Rolling Mill.  
Wetherill, R. & Co.....Iron Founders & Machinists.

**CHEST SPRING P. O.**  
Hart, Fred.....Iron Founder.

**CHICKIES.**  
Becker & Reinhold.....Rolling Mill.  
Benson & Cottrell.....Mfrs. Iron.

**CHRISTIANA.**  
Burnham & Broomal, Iron Founders & Machinists.  
Christiana Machine Co.

**CHULASKY.**  
Crevelling, Miles & Co.....Mfrs. Iron.

**CLARION.**  
Strickler & Ray.....Iron Founders.  
Thomas, R. B. & Co.....Plumbers.  
Thompson, J. G.....Millwright.

**CLARK.**  
Clark, Jacob.....Millwright.

**CLAYSVILLE.**  
Benade, P. S.....Machinist.

**CLEARFIELD.**  
Bigler, Reed & Co.....Iron Founders.  
Mills, Thomas.....Boiler Maker.  
Plympton, W. F.....Iron Founder.

**CLIFTON HEIGHTS.**

Whelan, Timothy.....Plumber.

**CLOVER CREEK.**

Brumbaugh, D. H. & Bro.....Iron Founders.  
Wineland & Seidenburg.....Machinists.

**COATESVILLE.**

Bickel, Frederick A.....Plumber, &c.  
Carmichael & Emmens.....Mfrs. Iron.  
Coatesville Iron Co.....Founders.  
Huston, Chas. & Sons.....Lukens Iron Works.  
Laurel Iron Works.  
McWilliams, John.....Millwright.  
Pennock, C. E. & Co.....Valley Iron Works.  
Ridgeway, Craig & Son.....Iron Fdrs. & Machinists.  
Rommel, Geo.....Wilmington and Northern R. R.  
Speakman, John.....Plumber.  
Worth, Bros.....Rolling Mill.

**COCOLAMUS.**

Beers, J. L. & Sons.....Iron Founders and Millwrights.  
Burns, Jonathan.....Millwright.  
Jamison, J. E.....Iron Founder.

**CODORUS.**

Anchey, A. & Co.....Machinists.

**COLEVILLE.**

Ireland, P. A.....Mfr. Tools.  
Phillips, D.....Machinist.

**COLLAMER.**

Romans, John.....Plumber.

**COLLEGEVILLE.**

Gottschall, A. H.....Sheet Iron Worker.  
Holman & Howell.....Iron Founders.

**COLUMBIA.**

Chestnut Hill Iron Co.  
Grubb, C. B.....Mfr. Iron.  
Keeley Stove Co.  
Miller, Samuel H.....Plumber.  
Model Engine Co.  
Perrotet, Jas.....Machinist.  
Shawnee Rolling Mill Co.  
Smedley, Ezra.....Mfr. Rakes.  
Sterling, Wagn'r & Co.....Boiler Makers.  
Supplee Steam Engine Co.  
Susquehanna Iron Co.....Rolling Mill.

**COLUMBUS.**

Soggs, Geo.....Mfr. Paring Knives.

**CONCORD.**

McKim, James H.....Iron Founder.

**CONNEAUTVILLE.**

Cruikshank & Meyer.....Founders & Machinists.  
Moulthrop F. & Sons.....Founders & Machinists.  
Robinson, F. M.....Iron Founder.

**CONNELLSVILLE.**

Boys, Porter & Co.....Iron Founders.  
Connellsville Machine & Car Co

**CONSHOHOCKEN.**

Bate, W. T. & Son.....Boiler Makers.  
Fulton, S.....Iron Founder and Machinist.  
Lukens, J.....Rolling Mill.  
Plymouth Rolling Mill Co.  
Thwaits, H. C.....Plumber and Gas Fitter.  
Wood, Alan & Co.....Iron.  
Wood, John, Jr. & Co.....Boiler Makers and Car Builders.

**CONYNGHAM.**

Getting, J. D.....Iron Founder.

**COOKPORT.**

Williams, Benj.....Machinery.

**COPLAY.**

Coplay Iron Co.  
Guttentag, J. Lewis.....Iron.

**COOPERSTOWN.**

Proper, Samuel P.....Millwright.

**CORRY.**

Corry City Iron Works.....Mfrs. Engines and Boilers.  
Franklin, S. J.....Plumber and Gas Fitter.  
Gibbs & Sterrett Mfg. Co.....Agl. Impls.  
Harmon, Gibbs & Co.....Iron Founders.  
King, J. H.....Plumber.  
King, H. & Sons.....Mfrs. Portable Engines.  
Lynch, P. I. & Co.....Mfrs. Engines and Boilers.  
Penney, F. S.....Mfr. Saws.

**CORSICA.**

Taylor, Newton.....Iron Founder.

**CORYDON.**

Whitcomb, N. J.....Millwright.

**COUDERSPORT.**

Gardiner, W. B.....Iron Founder.

**CRESSONA.**

Lendt, Christian.....Coppersmith.

**CRETE.**

Miller, A. J.....Millwright.

**CUMRU.**

Blankenbiller, J. R.....Mfr. Files.

**CUMBERLAND VALLEY.**

Leasure, G. M.....Machinist.

**CUPOLA.**

White, John.....Iron Founder.

**CURLSVILLE.**

Kaster, John E.....Iron Founder.

**CURWENSVILLE.**

Robison, J. & Son.....Iron Founders.  
Thompson, Jas & Son.....Iron Founders.

**CUSTER CITY.**

Bevan, Rich'd E.....Machinist.  
Hutchison, Joseph.....Machinist.

**DALLAS CITY.**

Jarecki Mfg. Co.....Machinery.

**DALLASTOWN.**

Geesey, Jonathan F.....Millwright.  
Grim, Jacob.....Millwright.  
Minnock, Jonathan.....Millwright.

**DALTON.**

Vosburg, Wm.....Iron Founder.

**DANBOROUGH.**

Kulp, Samuel.....Millwright.  
Biddle, Wm.....Iron Founder.  
Cobb, H. Q.....Plumber.  
Co-operative Iron and Steel Works.  
Creveling, Miles & Co.....Iron Works.  
Cruikshank, Moyer & Co.....Iron Founders.  
De Long, Daniel.....Iron Founder.  
Glendower Iron Works.  
Huber, Samuel & Sons.....Iron Founders.  
Maguire, M. T.....Plumber.  
Montour Iron and Coal Co.  
Montour Iron and Steel Co.  
Van Allen, T. O.....Rolling Mill.

**DAUPHIN.**

Dauphin Car Works.  
Shall & Welch.....Car Builders.

**DAVIS CITY.**

Phillips, David.....Machinist.

**DELANO.**

Lehigh Valley Car Works.

**DELMONT.**

Trees, Joseph T.....Millwright.

**DILLSBURGH.**

Sheffer, Peter & Sons.....Mfrs. Chains.

**DONALDSON.**

Ferg, Ad.....Iron Founder.

**DONEGAL.**

Smith, Peter.....Iron Founder

**DORLAN'S MILL.**

Torbert, Oliver J.....Millwright.

**DOUGLASSVILLE.**Clingan & Buckley.....Iron.  
Morret, B. F.....Mfr. Iron.**DOVER.**

Daron &amp; Hamme.....Machinists.

**DOWNINGTOWN.**Gordon, James R.....Plumber.  
Fondersmith, P.....Sheet Iron Worker.  
Miller, Guion & Co.....Machinists.**DOYLESTOWN.**Barrett, James.....Iron.  
Hulshizer & Lazellere.....Machinists.  
Kane, James.....Gas Fitter.  
Kulp, S. C.....Millwright.  
Tomlinson, Enos.....Plumber.**DRAKE'S MILLS.**

Dow, W. L.....Millwright.

**DUBLIN.**Swinx, Clinton H.....Sheet Iron Worker.  
Winkler, Jesse.....Sheet Iron Worker.**DUKE CENTRE.**Bole, J. & F. H.....Machinery.  
Coons, Houghton & Becker.....Machinists.  
Irvine & Morgan.....Machinists.  
Jones, S. M.....Machinist.  
Pass, W.....Boiler Maker.  
Sellen, Irvine & Co.....Machinists.  
Star Iron Works.**DUNCANNON.**

Duncannon Iron Co.

**DUNCANVILLE.**Gingery, John.....Millwright.  
Johnson, B. M. & Co.....Iron & Nail Works.  
Musselman, John.....Mfr. Nails.  
Portage Iron Co.**DURHAM.**Durham Iron Works.  
Thomas Iron Co.**EAGLE FOUNDRY.**

Scott, J. W.....Iron Founder.

**EAST BERLIN.**Feiser, Wm. B.....Millwright.  
Gable, G. B.....Millwright.  
Getz & Butt.....Mfrs. Plows.  
Ischop, John & Bros.....Machinists.  
Moul, Wm. B.....Machinist.**EASTBROOK.**Hinkson, J. & Sons.....Machinists.  
Mehard, R. W.....Millwright.**EAST GREENVILLE.**

Kriebel, Daniel.....Machinist.

**EAST MAUCH CHUNK.**

Bennyhoff, E. W.....Plumber.

**EASTON.**Beidler, P. S.....Millwright.  
Black, D.....Coppersmith.  
Drawbaugh & Chillis.....Machinists.  
Drink use, F. F.....Iron Founder & Machinist.  
Easton Lock Works.  
Gaw, John.....Brass Founder.  
Gebhart, Christian J.....Plumber.  
Haines, Harry.....Plumber.  
Hunt, Edward I.....Iron & Steel.  
Losey & Co.....Iron, &c.  
Oliver & Co.....Mfrs. Sheet Iron.  
Pearcock, Robt.....Plumber.  
Riegel, T. M.....Plumber.**EASTON—Continued.**Thompson Iron Co.  
Trumbore, Wm.....Plumber.  
Van Norman, Jacob.....Plumber.  
Williams, Joseph.....Mfr. Nails.  
Wilson, Jacob.....Iron Founder.  
Wilson, Edwin & Co.....Iron, &c.  
Young, Wm.....Brass Founder.  
Young & Schlough.....Iron Founders.**EAST SMITHFIELD.**

Forrest &amp; Kelly.....Iron Founders.

**EAST STROUDSBURG.**

Stauffer, Geo. E.....Iron Founder.

**EAST WATERFORD.**

Kough, Geo. W.....Iron Founder.

**EBENSBURG.**Bailey & Bolsinger.....Plumbers.  
Shoemaker, J. A. & H. A.....Iron Founders.**EBERLY'S MILLS.**

Drawbaugh, D.....Machinist.

**EDGE HILL.**

Cumberland Nail Co.

**EDINBURGH.**

Douglass, Wm.....Millwright.

**EFFORT.**

Wagner, Geo.....Mfr. Plows.

**ELDERTON.**Mills, John N.....Iron Founder.  
Wright, Jacob.....Iron Founder.**ELDORADO.**

Colclessor Bros.....Mfrs. Edge Tools.

**ELDRED.**

Tinsman, W. H.....Machinist.

**ELIMSPORT.**Canaday, Benj.....Machinist.  
Moore, John.....Millwright.**ELIZABETHTOWN.**Buch & Hei ey.....Iron Founders.  
Meckley, Samuel.....Mr. Rakes & Forks.**ELIZABETHVILLE.**Seibert, John.....Millwright.  
Swab, Jonas.....Mfr. Agl. Impts.**ELK CITY.**

Wilson Bros.....Machinists.

**ELK LICK.**

Salisbury Foundry Co.

**ELLENDALE.**

Kellinger, Kaufman &amp; Co.....Mfrs. Iron.

**ELYBURG.**

Swank, Henry.....Iron Founder.

**EMAUS.**Smith, Matthias.....Plumber.  
Wegenlaben, Emil.....Mfr. Mill Picks.**EMILENTON.**Crawford, D. A.....Iron Founder.  
Curry, Peter.....Plumber.  
Fanning & Goodwin.....Machinists.  
Hariser, C.....Boiler Maker.  
Porterfield & McCombs.....Iron.**EMPORIUM.**Robertson, J. F.....Machinist.  
Rockwell, H. C.....Millwright.**ENTERLINE.**

Park, Geo.....Mfr. Stoves.

**EPHRATA.**Althouse & Co.....Mfrs. Plows.  
Kraatz, D. K.....Millwright.  
Royer, Reuben R.....Iron Founder & Machinist.

**ERIE.**

Althof, Wm. & Son.....Mfrs. Files.  
 Baas, Althof.....Mfr. Iron Fences.  
 Ball Bros. & Belknap.....Mfrs. Edge Tools.  
 Ball Engine Co.....Mfrs. Engines.  
 Black & Germer.....Mfrs. Stoves.  
 Brown & Thomas.....Iron.  
 Butler, Wm. J.....Plumber.  
 Chicago & Erie Stove Co.  
 Cleveland & Co.....Iron Founders.  
 Cleveland & Hardwick.....Machinists.  
 Coats, J.....Machinist.  
 Davenport, Fairbairn & Co.....Mfrs. Car Wheels.  
 Erie Car Works.  
 Erie Forge Co.....Mfrs. Car Axles.  
 Erie Malleable Iron Co.  
 Erie Torsion Spring Mfg. Co.  
 Fry, Geo. E.....Plumber.  
 Gorr, Bass & Co.....Mfrs. Iron Fences.  
 Harker, J. B. & Co.....Iron Founders & Machinists.  
 Huff, Gabriel.....Mfr. Machinery.  
 Jarecki, Hays & Co.....Brass Founders.  
 Jarecki Mfg. Co.....Brass & Iron Works.  
 Liley, S. & Son.....Machinists.  
 Miller Bros.....Plumbers.  
 Mizener, F. A.....Iron.  
 Mount Hickory Iron Co.  
 Nagle, T. M.....Mfr. Engines.  
 Noble Sewing Machine Co.  
 Noble & Hall.....Iron Works.  
 Selden & Griswold Mfg. Co.....Pumps, Iron, &c.  
 Skinner & Wood.....Iron Founders & Machinists.  
 South Erie Iron Works.  
 Stearn's Mfg. Co.....Engine Builders & Machinists.  
 Stonemetz Printers' Machinery Co.  
 Voelk, Andrew.....Iron Works.  
 Wheeler Iron Co.....Rolling Mill.  
 Williams, R. T. & R.....Plumbers & Gas Fitters.

**ETNA.**

Fitch, Jno. & Bro.....Machinists.  
 Spang Steel & Iron Co.

**EVERETT.**

Felton, Frederick.....Iron Founder.  
 Smouse, Wm.....Machinist.

**EXETER STATION.**

Moore, I.....Mfr. Iron.  
 Seidel, R. B.....Mfr. Iron, &c.

**FAIRVIEW VILLAGE.**

Roberts, Milton O.....Machinist.

**FAIR HOPE.**

Tressler, J. H.....Millwright.

**FALLSTON.**

Darrah, M. & S. H.....Machinists.  
 Standard Horse Nail Co.  
 Thornily, J. M.....Iron Founder.  
 Townsend, W. F. & Co.....Mfrs. Rivets.

**FAYETTEVILLE.**

George, Wm. H. & H.....Machinists.  
 Lightfoot, Jacob.....Iron Founder & Machinist.

**FERNDAL.**

McKee & Fuller.....Mfrs. Cars, Car Wheels & Axles.

**FIELDS STATION.**

Moore, Seth.....Millwright.

**FISHER'S FERRY.**

Minnier, A. J.....Millwright.  
 Minnier, Wm.....Millwright.  
 Reitz, J. H.....Millwright.  
 Shipman, Peter.....Millwright.

**FISHERVILLE.**

Bowman, Philip.....Machinist.

**FISHING CREEK.**

Eveland, W. E.....Machinist.  
 Miller, Geo.....Iron Founder.

**FLATWOOD.**

Mills, J. P.....Millwright.

**FLEETVILLE.**

Gibbs, D. C.....Millwright.

**FLEETWOOD.**

Kern, Amandus.....Mfr. Mill Picks.  
 Schaeffer, Merkle & Co.....Iron Founders.  
 Weber, Jonas.....Mfr. Agl. Impts.

**FLEMINGTON.**

Havey, O. A. & Bro.....Iron Founders.  
 Jobson, Samuel.....Millwright.  
 Slenker, Cyrenus.....Millwright.

**FOGLESVILLE.**

Sitler, Wm.....Mfr. Agl. Impts.

**FORKS.**

Shives, Samuel.....Mfr. Rakes.

**FORT HUNTER.**

Reed, Peter.....Millwright.

**FORT LITTLETON.**

Cromer, I. J.....Iron Founder.

**FORT WASHINGTON.**

Conrad, A & I.....Mfrs. Augers.

**FOSTER.**

Casterline, W. S.....Mfr. Bolt Shears.

**FOSTER BROOK.**

Lego, S. H. & Son.....Machinists.

**FOUNTAIN DALE.**

Sprinkle, Wm. J.....Millwright.

**FOXBURG.**

Ball, F. H.....Machinery.  
 Edwards, W. H. & Co.....Machinists.  
 Kennerdell, Edw.....Pittsburg, Bradford & Buffalo R. R.  
 Schermerhorn, S. P.....Machinist.  
 Simpson & Keil.....Boiler Makers.

**FRANKLIN.**

Clark & Bunce.....Plumbers.  
 Coefield & Hammond.....Boiler Makers.  
 Ellis, Geo. O.....Plumber.  
 Emery, W. N.....Iron Founder.  
 Franklin Machine Works.  
 Hammond & Coon.....Boiler Makers.  
 Hunter, H. L.....Plumber.  
 Lane, D. T. & Son.....Machinists.  
 Maloney & McElheney.....Machinists.  
 Maloney & Hurley.....Boiler Makers.  
 Mehan & Brennan.....Boiler Makers.  
 Quinn, Michael.....Plumber.  
 Reynolds, A.....Machinery.  
 Sheehan, Daniel.....Gas Fitter.  
 Smith, James.....Machinist.

**FRANKLIN TOWNSHIP.**

Ring & Bro.....Millwrights.

**FRANKTOWN.**

Blair Iron & Coal Co.

**FREEBURG.**

Fisher, Henry C.....Iron Founder.

**FREEMANSBURG.**

Shimer, G. J. & Bro.....Machinists.  
 Shimer, Wm., Sons & Co.....Mfrs. Hardware.  
 Weber, N.....Machinist.

**FREEPORT.**

Meyer & Yenny.....Iron Founders.

**FRYBURG.**

Detar, David & Bro.....Iron Founders.

**GAP.**

Lantz, D. Z.....Plumber.

**GERMANSVILLE.**

Snyder, Edwin.....Machinist.

**GERYVILLE.**

Krauss, Bros.....Machinists.

**GETTYSBURG.**

Armors, Robt. D.....Plumber.  
 Jacobs, G. E.....Mfr. Chains.  
 Pitzer & Tracy.....Iron Founders.  
 Sterner, David.....Iron Founder & Machinist.

**GIBLARTAR.**

Gibraltar Iron Works.  
 Seyfert, Simon & Co.....Iron Works.

**GIRARD.**

Drury, C. E.....Machinist.  
 Girard Wrench Mfg. Co.

**GLEN ROCK.**

Fry, Herbst & Co.....Machinists.

**GLENVILLE.**

Bricker, Conrad M.....Iron Founder.

**GOODELL.**

Town, R. H.....Machinist.

**GOWEN.**

West Buck Mountain Coal & Iron Co.

**GRANVILLE.**

Selick, Henry.....Iron Founder.

**GRAPEVILLE.**

Henry, Jordan.....Machinist.

**GRATER'S FORD.**

Freed, Joel C.....Machinist.  
 Knox, Jno.....Iron & Steel.

**GRAYSVILLE.**

Leach & Son.....Millwrights.

**GREAT BEND.**

Spearbeck, Benj.....Machinist.

**GREENCASTLE.**

Crowell, J. B. & Co.....Machinists.  
 Gardner, Wm.....Millwright.  
 Goetz, Godfrey A.....Iron Founder.  
 Stover Wind Engine Co.

**GREENFIELD.**

Bover, D. R.....Millwright.

**GREEN PARK.**

Rheems & Bro.....Iron Founders.

**GREEN RIDGE.**

Pike & Hull.....Mfrs. Edge Tools.

**GREENSBOROUGH.**

Elliott, W. S.....Machinist.  
 Kramer & Pennington.....Iron Founders.

**GREENVILLE.**

Dideon, Peter.....Iron Founder.  
 Greenville Iron Co.  
 Hamblin Sons & Co.....Machinists.  
 Hodge, E. W.....Iron Founder.  
 Kimberly, Carnes & Co.....Rolling Mill.  
 Packard & Co.....Iron.  
 Stone, Thomas.....Plumber.  
 Washburn, A. W. & Son.....Iron Founders.

**GREENWOOD.**

Lemon, Elijah.....Millwright.

**GREENWOOD FURNACE.**

Logan Iron & Steel Co.

**GRIER'S POINT.**

Sechrist, J. D.....Millwright.

**GUTHRIESVILLE.**

Dowlin, James.....Machinist.

**GUTHS STATION.**

Sittler, Peter.....Machinist.

**GUTHSVILLE.**

Krasely, Jacob.....Machinist.

**HALIFAX.**

Kopenhafer, Cornelius.....Iron Founder.

**HAMBURG.**

Deisher, Henry.....Iron Founder.  
 Derr, B.....Iron Founder.  
 Loose, Seaman & Co.....Mfrs. Plows.  
 Nevegold, Scheide & Co.....Rolling Mill.  
 Phillips & Burkey.....Iron Founders & Machinists.  
 Reinhard, Chas.....Millwright.  
 Seibert, Henry.....Iron Founder.  
 Smith, E. M. & Sons.....Mfrs. Chains.  
 Wister, Fisher & Fox.....Rolling Mill.

**HANOVER.**

Baylor, Adam, Hanover Junction, Hanover & Gettysburg Railroad.  
 Fitz, Jacob.....Iron Founder.  
 Flickinger, J. & P.....Iron Founders.  
 Moul & Co.....Mfrs. Agl. Impl'ts.

**HARMONY.**

Weckbecker, H.....Iron Founder.  
 Ziegler, Chas.....Machinist.

**HARRISBURG.****PLUMBERS, STEAM, AND GAS FITTERS.**

Boehmer, F. A. Parkhill, Wm. A.  
 Bradley, Patrick P. Rauch, John.  
 Colsher, S. C. Saul, M. T.  
 Elder, M. B. Schlager, Jacob F.  
 Kramer, J. A. Schlager, W. H.  
 Lutz, James H. Stewart, H. C.  
 McArdle, Fergus J. Toner & Randall.  
 Marshbank, E. Wagner, Samuel P.  
 Neill, J. W. Wykoff, William.  
 Oglesby, G.

**MISCELLANEOUS.**

Bailey, Chas. L. & Co.....Mfrs. Nails & Spikes.  
 Bay, Wm. F. & Bro.....Iron Founders & Machinists.  
 Bostgen, Henry.....Mfr. Files.  
 Brown & Reel.....Iron Founders.  
 Brua, D. M.....Millwright.  
 Central Iron Works.  
 Harrisburg Car Mfg. Co.  
 Harrisburg Foundry & Machine Co.  
 Harrisburg Nail Works.  
 Hickok, W. O.....Machinist.  
 Hummell, Fenderich & Co.....Iron & Steel Works.  
 Jackson Mfg. Co.....Steel Wheel arrows.  
 Jones, J. W.....Mfr. Chains.  
 Kepner, Geo. L.....Mill Machinery.  
 Kilner, Geo. H.....Mfr. Files.  
 Lochiel Rolling Mill Co.  
 Lysle & Poole.....Mfrs. Steam Heaters.  
 McCormack & Co.....Rolling Mill.  
 Marshbank, J. D. & Son.....Mfrs. Steam Heaters.  
 Millinger's Improved Jump Seat Iron Mfg. Co.  
 Olsen & Bro.....Machinists.  
 Paxton Rolling Mills.  
 Pennsylvania Steel Co.  
 Sheetz, C. P.....Mfr. Files.  
 Stevenson, D. Jr.....Machinery.  
 Stoddard, J. W. & Co.....Mfrs. Agl. Impl'ts.  
 Tippetts, Robert's Sons.....Boiler Makers.  
 Willson, Bros & Co.....Machinists.  
 Wistar, J. & J.....Mfrs. Iron.

**HARRISVILLE.**

Bingham & Co.....Iron Founders.

**HARVEYVILLE.**

Rittenhouse, E.....Iron Founder.

**HATBOROUGH.**

Mitchell, W. A.....Mfr. Agl. Impl'ts.

**HAYMAKER.**

Parker & Edwards.....Machinists.

**HAZLETON.**

Allen, Maus, & Co.....Iron Founders & Machinists.  
 Allison, Jno. & Co.....Iron Founders.  
 Bright, J. C. & Co.....Iron.  
 Fichter, Wm.....Plumber.

**HEISTER'S MILL.**

Gruber, E. H.....Millwright.  
 Reigel, W.....Plumber.



**HEMPFIELD.**

McShain, Manuel &amp; Co.....Rolling Mill.

**HENRIETTA.**

Cambria Iron Co.

**HEPLER.**

Haas, David.....Iron Founder.

**HERRICKVILLE.**

Turrill, S. E.....Machinist.

**HICKORY.**

Simpson, John.....Millwright.

**HINKLETON.**

Shirley, Martin.....Millwright.

**HOLLIDAYSBURG.**

Bagley, Wm. C. &amp; Son.....Machinists.

Blair Iron &amp; Coal Co

Hollidaysburg &amp; Gap Iron Co.

Hollidaysburg Iron &amp; Nail Co.

Juniata Rolling Mill Co.

McFarlane, Thos.....Machinist.

McLanahan &amp; Stone.....Iron Founders.

Madden Bros.....Boiler Makers.

Rhodes, Geo. W.....Mfr. Agl. Implts.

Tearney, James.....Sheet Iron Worker.

White, E.....Machinist.

**HOLLISTERVILLE.**

Mott, J. B.....Iron Founder.

Rockafeller, J. M.....Iron Founder.

**HOMESTEAD.**

Pittsburg Bessemer Steel Co.

**HOMESVILLE.**

Roman, John.....Plumber.

**HONESDALE.**

Baker &amp; Bennett.....Plumbers

Charlesworth, Thos.....Machinist.

Gill, B. F.....Iron Founder.

Knapp, Gilbert.....Iron Works.

Sutton, J. H.....Gas Fixtures.

White, G. &amp; Co.....Mfrs. Axes.

**HOOVERSVILLE.**

Hoover, David.....Millwright.

Hoover, William.....Millwright.

**HOP BOTTOM.**

Casterlen, W. S.....Mfr. Bolts &amp; Nuts.

**HOPEWELL.**

Aschom, W. C.....Iron Founder &amp; Machinist.

Simon, J. W.....Machinist.

**HOJENSACK.**

Krause, Bros.....Iron Founders &amp; Machinists.

**HOWARD.**

Lauth, Bernard.....Iron Works.

**HUBERSBURG.**

Kessinger, Jos.....Iron Founder.

Swartz, Geo.....Iron Founder.

**HUDSONDALE.**

Hudson, S. W. &amp; Co.....Iron Founders.

**HUGHESVILLE.**

Bigger, Robt. M.....Machinist.

Edwards, R. H.....Iron Founder.

Kelley, Jeremiah.....Iron Founder &amp; Machinist.

Snowdon, Wm.....Iron Founder &amp; Machinist.

**HULTON P. O.**

Dexter Spring Co.....Mfrs. Carriage Springs

Metcalfe, Paul &amp; Co.....Mfrs. Tools.

**HUNTERS RANGE.**

Clark, P. B.....Millwright.

**HUNTERSTOWN.**

Morrison, F.....Machinist.

**HUNTINGDON.**

Blain Bros.....Iron Founders.

Blake, Easton.....Iron Founder.

Porter, A. M. &amp; Co.....Machinists.

Simpson, James.....Iron Founder.

**HYDE PARK.**

Gross, Samuel.....Machinist.

Owens, Wm.....Mfr. Horse Shoes &amp; Nails.

Simon, Conrad.....Mfr. Files.

**ICKESBURG.**

Hench &amp; Dromgold.....Mfrs. Agl. Implts.

Liggett, Samuel.....Iron Founder.

**IDAVILLE.**

Sidsing, John.....Machinist.

**INDIANA.**

Chilled Car Wheel &amp; Plow Factory.

Everett, Henry E.....Machinist.

McCartney, S. &amp; Son.....Plumbers.

McElhany, W. G.....Machinist.

McFarland, Irwin.....Iron Founder.

Young, R. A.....Machinist.

**IRON BRIDGE.**

Ellis, H. H.....Millwright.

Holman, Howell C.....Iron Founder.

**IRVINETON.**

Leighty, James.....Iron Founder.

White, Wm.....Machinist.

**IRWIN'S STATION.**

Cunningham &amp; Over.....Iron Founders.

Hockinsmith, F. C.....Machinist.

**JACKSON HALL.**

Flanagan, F.....Mfr. Plows.

**JACKSONVILLE.**

Long, Henry.....Machinist.

**JEANSVILLE.**

Haydon, J. C. &amp; Co.....Iron Works.

**JEFFERSON.**

Auchey, A.....Iron Founder.

**JEFFERSON LINE.**

Heberling, J. F.....Iron Founder.

**JENKINTOWN.**

Kohl, Alfred S.....Plumber.

Kohl, Geo. M.....Plumber.

Mather, Chas. Jr.....Plumber.

**JERSEY SHORE.**

Grosh, Wm. B.....Machinist.

Snyder, G. S. &amp; Co.....Iron Founders.

Wilson, W. N. &amp; Co.....Iron Founders &amp; Machinists.

Womer, Chas.....Plumber &amp; Gas Fitter.

**JOHNSTOWN P. O.**

Bailey, S. C.....Plumber.

Cambria Iron &amp; Steel Co.

Fulton Foundry.

Gautier Steel Works.

Haunon, Jno.....Iron Founder.

Hay, G. o. M.....Plumber.

Heuber, Nicholas.....Iron Founder.

Hipner, Nicholas.....Iron Founder.

Hoffman, J. T. &amp; Co.....Machinists.

Loulther, Daniel.....Millwright.

McKenna, Jno.....Machinist.

McKenna &amp; Co.....Plumbers.

McMillan &amp; Co.....Plumbers.

Swank, C. M.....Machinist.

Yost, C. J.....Plumber.

**JORDAN.**

Bittner, Lewis.....Machinist.

Zimmerman, S.....Iron Founder.

**KANE CITY.**

Gross, S.....Boiler Maker.

Hanna, J.....Machinist.

McKinley, J.....Machinist.

**KARNS CITY.**

Andrews, Harry.....Boiler Maker.  
Luttrell, J. H.....Machinist.  
Mahoney, Michael.....Boiler Maker.  
Moorhead & Lardin.....Machinist.  
Sherman, Joseph.....Iron Works.

**KELLERSVILLE.**

Marsh, E. B. & Bro.....Iron Founders & Machinists.

**KELLEY CROSS ROADS.**

Ketchum, Peter.....Millwright.

**KELTON.**

Ironsides, Wm.....Mfr. Agl. Implts.

**KENDALL CREEK.**

Corrigan & Paradise.....Machinists.  
Keohe, E.....Boiler Maker.  
McClure, E. G.....Machinist.  
Ryan & O'Brian.....Boiler Makers.

**KENNETT SQUARE.**

Barnard, R. W.....Plumber.  
Crozer, J. Eli.....Iron Founder.  
Pennock, Mfg. Co.....Agl. Implts.  
Pennock, S. & Sons Co.....Mfrs. Road Machines.

**KIMBERTON.**

Miller, Edward.....Millwright & Machinist.

**KITTANING.**

Crawford & Heilman.....Iron Founders  
Kittaning Iron Co.....  
McCullough, James J.....Iron Founder.  
Marshall, Jno.....Iron Founder.  
Quigley, Wm.....Machinist.  
Rupp, James.....Plumber.  
Sharp, T. J.....Plumber.  
Stiveson, H. K.....Plumber.

**KLECKNERSVILLE.**

Graver, Geo. A.....Iron Founder.

**KNAUERTOWN.**

Knauer, Davis.....Machinist.

**KNOBSVILLE.**

Ambrose, Jacob.....Machinist.

**KNOX.**

Bole, J. & F. H.....Machinists.  
Brothers & Crawford.....Machinery.  
Burns, W. & Son.....Machinery.  
Feely Bros.....Iron Founders.  
Miller, Chas.....Boiler Maker.  
Reniff, C. W.....Iron Founder & Machinist.  
Smith Bros.....Novelty Iron Works.

**KNOXVILLE.**

Gleason, L. C.....Iron Founder.

**KREIDERSVILLE.**

Wolf, Jas.....Machinist.  
Young, P. J.....Machinist.

**KRIBBS FARM.**

Dunivan, H.....Boiler Maker.

**KUTZTOWN.**

Zehm & Bro.....Iron Founders.

**LAIRDSVILLE.**

Dugan, Geo.....Millwright.

**LAMAR.**

Loveland & Reuter.....Mfrs. Axes.  
Pifer A. T.....Iron Founder.

**LAMOKIN.**

Combination Steel & Iron Co.

**LANCASTER.**

**PLUMBERS, STEAM AND GAS FITTERS.**

Acres, Thos.....Foose, Jacob.  
Arnold, Jno L.....Gemperling, John.  
Bachler, Leonard H.....Humphreiville & Keif-  
Bihl, Anthony.....fer.  
Buckius, Benj. R.....Miles, David.  
Cogley & Smith.....Schaum, Jno. P.  
Evarts & Overdue.....Smith, W. J.  
Flinn & Breneman.....Smith, Wm.

**MISCELLANEOUS.**

Anderson, Thos.....Machinist.  
Bender, Potts & Co.....Mfrs. Iron Fences.  
Best, Jno.....Boiler Maker.  
Blickenderfer, Henry.....Machinist.  
Blickenderfer, Richard.....Iron Founder.  
Brady, W. N.....Mfr. Edge Tools.  
Bruerdlerly, Jos.....Mfr. Agri. Impl'ts.  
Burkholder, D. K.....Machinery.  
Coebran, Jno. J.....Mfr. Locks.  
Davish, Josiah.....Mfr. Agri. Impl'ts.  
Diller, Frank.....Iron Founder.  
Diller, Geo. J.....Coppersmith.  
Diller, Harry A.....Iron & Steel.  
Diller, Samuel.....Coppersmith.  
Eicholz, R. L.....Machinist.  
Fram & Bro.....Mfrs. Locks.  
Geiser Mfg. Co.....Machinists.  
Grubb, C. B. & Son.....Mfrs. Iron, &c.  
Harberger, McCully & Co.....Iron Founders.  
Harnish, B. W.....Iron Founder.  
Holman, J. W.....Machinist.  
Huber, Jos. H.....Brass & Iron Founder.  
Keeler, Samuel.....Mfr. Agri. Impl'ts.  
Knapp, J. T.....Machinist.  
Kulp, D. H.....Iron Founder.  
Lancaster Bolt Co.  
Lancaster Lock Works.  
Landis, E. F.....Mfr. Locks.  
Landis, Levi. K.....Machinist.  
Leman, Henry E.....Mfr. Rifles.  
Lippold, Charles.....Mfr. Files.  
McCuen, A. C.....Mfr. Locks.  
Mullen, Wm. T.....Mfr. Agri. Impl'ts.  
Nagle, P.....Mfr. Jack Screws.  
Pea-ock & Thomas.....Mfrs. Iron.  
Penn Iron Co.  
Shertz, Jno.....Mfr. Edge Tools.  
Smith & Buchanan.....Mfrs. Punches & Bolt Cutters.  
Spencer, A. F.....Mfr. Files.  
Steinman, Geo. M., & Co.....Mfrs. Iron.  
Walter, Andrew.....Sheet Iron Worker.  
Weitzel, J.....Plumber.  
Welchus, Albert C.....Machinist.  
Werner, J. G.....Mfr. Gaus.

**LANESBORO.**

Barnes Mfg. Co.....Machinists.

**LANGHORNE.**

Ely, Jno. S.....Machinist.

**LANSDALE.**

Heebner & Sons.....Machinists.

**LATROBE.**

Baker, S. H., & R.....Car Builders.  
O'Brien, E.....Machinist.

**LAURELTON.**

Albright, Jas. H.....Mfr. Bolts & Nuts.  
Jackson Iron Co.  
Smith, W. E., & S. S.....Iron Founders.

**LAWRENCEVILLE.**

Kinsey, James.....Iron Founder & Machinist.

**LEACOCK.**

Andes, Valentine & Sons.....Iron Founders.  
Myer, Daniel.....Machinist.

**LEAMAN PLACE.**

Kennedy, Jno. A.....Machinist.

**LEBANON.**

Coleman's, R. W. Heirs.....Mfrs. Iron.  
 Egolf, Chas. & Co.....Iron Founders.  
 Krause, Geo. & Co.....Iron & Steel.  
 Lebanon Mfg. Co.....Cars & Engines.  
 Lebanon Stove Works.  
 Light, Samuel E.....Rolling Mill.  
 McLaughlin, H., & Sons.....Plumbers.  
 Meily, I., & R.....Mfrs. Iron.  
 Obert, F. J.....Boiler Maker.  
 Oves, Carroll.....Machinist.  
 Penna. Bolt & Nut Co.  
 Pott, Isaac & Co.....Boiler Makers.  
 Pott, Henry & Co.....Boiler Makers.  
 Rosenberger & Light.....Iron Founders.  
 Sherk & Mish.....Iron Founders.  
 Van De Sand & Capp.....Mfrs. Iron.  
 Weimer Machine Works.  
 Yeagley, Edward.....Millwright.  
 Young, James I.....Plumber.  
 Zimmerman, Faler & Co.....Machinists.

**LEECHBURG.**

Beale, J. G.....Mfr. St el.  
 Kirkpatrick & Co.....Iron Works.

**LEE'S CROSS ROADS.**

Ahl, P. A., & Bro.....Mfrs. Iron.

**LEESPORT.**

Fisher, Daniel B.....Mfr. Iron.

**LEHIGHTON.**

Gable, J. L.....Plumber.  
 Lehigh Stove & Mfg. Co.

**LENHARTSVILLE.**

Weidner, G. B.....Millwright.

**LENOXVILLE.**

White, Hiram.....Iron Founder.

**LERAYSVILLE.**

Bailey, E. M.....Iron Founder.

**LE ROY.**

West, H. W.....Machinist.

**LEWISBERRY.**

Hammond, W. Scott.....Mfr. Springs.  
 Randolph, S., & J.....Machinists.  
 Truup, Wm.....Mfr. Knives.

**LEWISBURG.**

Carkhuff, Ralph.....Machinist.  
 Central Mfg. Co.....Agrl. Impl'ts.  
 Harris, R. B.....Gas Fitter.  
 McCoy & Ammon.....Plumbers.  
 Marsh, Jas. S.....Mfr. Castings & Impl'ts.

**LEWISTOWN.**

Brannon, T. H.....Machinist.  
 Franciscus, F. G.....Iron, &c.  
 Glamorgan Iron Co.  
 Logan Iron & Steel Co.  
 Mann, Wm. Jr., & Co.....Mfrs. Axes.  
 Miller, Geo., & Son.....Plumbers.  
 Standard Steel Co.  
 Van Leer, J. P.....Boiler Maker.  
 Weldon Engine & Brass Co.  
 Zerbe, Edward M.....Plumber.

**LIBERTY.**

Green, J., & Son.....Iron Founders.  
 Moore, T. J.....Iron Founder.  
 Mott, Matthew B.....Gas Fitter.  
 Seachrist, Geo.....Millwright.

**LIGHT STREET.**

Hulshizer, J. M.....Machinist.

**LIGONIER P. O.**

Hibb Mfg. Co.....Iron Founders & Machinists.  
 Murdock, Samuel.....Iron Found.r.

**LIMERICK STATION.**

March, Brownback & Co.....Mfrs. Stoves, &c.

**LIMESTONE.**

Steward, J. W.....Millwright.

**LIMESTONEVILLE.**

Thomas, L. S.....Machinist.

**LINDEN HAJ.L.**

Ross, J. M.....Machinist.

**LINWOOD.**

Pearson Mfg. Co.....Machinery.  
 Pioneer Iron Works.  
 Seiders, Chas.....Iron, &c.

**LISBURN.**

Mumma & Boyer.....Iron, &c.

**LISTONBURGH.**

Wilhelm, Samuel.....Millwright.

**LITITZ.**

Becker, Christian B.....Machinist.  
 Kreiter, Chas. H.....Millwright.  
 Lititz Plow Co.....Mfrs. Plows.  
 Regemas, Wm. H.....Coppersmith.

**LITTLE OLNEY.**

Brendlinger & Co.....Iron.

**LITTLESTOWN.**

Bashoar, David.....Machinery.  
 Bear, Jacob.....Millwright.  
 Miller & Barker.....Machinists.

**LIVERPOOL.**

Keagle, John.....Iron Founder.  
 Thorp, G. J. & Co.....Iron Founders.  
 Zearing, Henry.....Iron Founder.

**LOBACHSVILLE.**

Reinert, Wm. S.....Machinist.

**LOCK HAVEN.**

Caldwell, S. W.....Iron, &c.  
 Foust & Elliott.....Boiler Makers.  
 Fulton, Samuel.....Millwright.  
 Harvey, O. A. & Bro.....Iron Founders.  
 Knights, Agar & Co.....Machinists.  
 Mann, E. & Sons.....Mfrs. Tools.  
 Martin, Samuel Z.....Plumber.  
 Ricker's, J. H. Sons.....Iron Founders.  
 Thomas, S. H. & Son.....Plumbers.

**LOCUST VALLEY.**

Morey & Beidley.....Iron Founders.

**LONG LEVEL.**

Oberdorff, G. S.....Machinist.

**LONG SWAMP.**

Wentling & Siegfried.....Machinists.

**LOWER BERN.**

Gruber, Erasmus H.....Mfr. Plows.

**LOWER MERION.**

Croft, Samuel.....Brass Founder.

**LUMBER CITY.**

Worts, A. F.....Iron Founder.

**LYKENS.**

Hensel, J. M.....Iron Founder.

**LYNNPORT.**

Snyder, Benj.....Machinist.  
 Snyder, Owen.....Machinist.

**LYON VALLEY.**

Gressly, Jonas.....Machinist.

**McALLISTERVILLE.**

Jamison, John E.....Iron Founder.

**McCLURE CITY.**

Bratton, Wm.....Iron Founder.

**McCONNELLSBURG.**

Seyler, W. B.....Machinist.

**McCONNELLSTOWN.**

Bupp, S.....Iron Founder.

**McEWENSVILLE.**

Gray, S. R. .... Iron Founder.  
 Johnson, J. J. .... Machinist.  
 Wesner, Henry. .... Millwright.  
 Yearick, John. .... Machinist.

**McKEESPORT.**

Cassidy & Co. .... Mfrs. Steel.  
 Downer, J. W. .... Machinist.  
 Kurtz & Painter. .... Plumbers.  
 May, R. J. & Co. .... Iron Founders.  
 National Tube Works Co.  
 Ryan, J. F. & Son. .... Mfrs. Sheet Iron.  
 U. S. Iron & Tin Plate Co.  
 Wood, W. D. & Co. .... Iron Works.

**McLANE.**

Nesbitt, Robt. .... Machinist.

**McVEY TOWN.**

Pincein, J. W. & Son. .... Iron Founders.  
 Stevenson, W. P. .... Iron & Steel.

**MACUNGIE.**

Macungie Iron Co. .... Iron Founders.  
 Miller & Son. .... Iron Founders.

**MADISON.**

Fulton, Wm. .... Iron Founder.

**MAHANAY CITY.**

Grant Iron Works.  
 Miller, Frederick. .... Gas Fitter.  
 Morgan, Wm. & Bro. .... Plumbers.  
 Short, W. .... Plumber.

**MAITLAND.**

Yeager, Thomas. .... Millwright.

**MAINVILLE.**

Pennock, C. E. & Co. .... Mfrs. Iron.

**MALVERN.**

Still, J. J. .... Plumber.

**MANCHESTER.**

Yinger, John S. .... Machinist.

**MANHEIM.**

Eby, Stehman & Co. .... Iron Founders.  
 Miller, M. G. .... Machinist.

**MANSFIELD.**

Bailey Bros. .... Iron Founders.  
 Wilson, R. F. .... Iron Founder.

**MARIETTA.**

Gramm, S. B. .... Iron Founder & Machinist.  
 Hess, John. .... Millwright.  
 Koath, G. H. .... Machinist.  
 Marietta Hollowware & Enameling Co.  
 Montgomery, John. .... Millwright.

**MARSHALLTON.**

Embree, Wm. G. .... Mfr. Agl. Impl'ts.  
 Loller, Wm. & Sons. .... Plumbers.

**MARTINSBURG.**

Morrow & Co. .... Iron Founders.  
 Snowberger & Co. .... Iron Founders.

**MARTINS CREEK.**

Kutz, Edward. .... Machinist.

**MAUCH CHUNK.**

Albright & Siroll. .... Iron Founders & Machinists.  
 Carbon Iron & Pipe Co.  
 Carbon Rolling Mill Co.  
 Liggett, Cornelius. .... Iron & Steel.  
 Lilly, Wm. .... Iron.  
 Spengler & Esser. .... Plumbers.  
 Stron W. H. .... Machinist.  
 Oppold, Geo. .... Plumber.

**MEADVILLE.**

Barrett Bros. .... Machinists.  
 Crawford Iron Works.  
 Curry & Co. .... Iron Founders.  
 Dickson, Wm. F. .... Iron Founder.  
 Hampson, Joseph. .... Gas Fitter.  
 Harper & Kay. .... Mfrs. Engines.  
 Hazlett, James. .... Machinist.  
 McNeill, Benj. .... Iron Founder.  
 Market Plumbing, Gas & Steam Fitting Co.  
 Myers & Grew. .... Iron Founders.  
 Phoenix Iron Works.  
 Renche & Rice. .... Plumbers.  
 Sennett, G. B. .... Iron Founder & Machinist.

**MECHANICSBURG.**

Elecock, Joseph. .... Mfr. Plows.  
 Hauck & Comstock. .... Iron Founders.  
 Hazlett, Isaac & Son. .... Plumbers.  
 Kimmel, Jacob. .... Plumber.  
 Potts, John R. .... Machinist.  
 Strech, J. B. .... Millwright.  
 Van Kirk, D. P. .... Plumber.

**MEDIA.**

Buckley, Ralph. .... Plumber.  
 Carv, W. H. .... Plumber.  
 Howarth, Richard S. .... Plumber.  
 Ogden, C. E. & A. P. .... Mfrs. Edge Tools.

**MEHOOPANY.**

Ingham & Vose. .... Iron Founders.

**MERCER.**

Albin & Sykes. .... Iron Founders.  
 Sheriff, J. M. .... Iron Founder.

**MERCERSBURG.**

Hays, Marriot. .... Millwright.  
 Pensinger, Jno. .... Millwright.  
 Seylor, J. M. .... Iron Founder.

**MERWINSBURGH.**

Hirst, S. D. .... Millwright.

**MEXICO.**

Hew, George. .... Iron Founder.

**MYERSDALE.**

Paul, Alexander. .... Iron Founder.

**MIDDLETOWN (Dauphin County).**

American Tube & Iron Co.  
 Brinser, E. C. .... Mfr. Agl. Impl'ts.  
 Coughlin, G. A. .... Machinery.  
 Ertle, Geo. W. .... Gas Fixtures.  
 Keiser & Bro. .... Sheet Iron Worker.  
 Raymond & Campbell. .... Iron Founders & Machinists.  
 Schall & King. .... Car Works.

**MIDDLETOWN (Westmoreland Co).**

Fulton, Isaac. .... Iron Founder & Machinist.

**MIFFLINBURGH.**

Mader, S. F. .... Iron Founder.  
 Stayman, J. M. .... Iron Founder.

**MIFFLINTOWN.**

Holman, David. .... Iron Founder.

**MIFFLINVILLE.**

Creasy, C. .... Machinist.  
 Hess, Alfred. .... Machinist.

**MILESBURG.**

Curtin & Co. .... Iron Works.  
 Easington, C. K., Jr. & Co. .... Mfrs. Axes.  
 Green, J. W. .... Iron Founder & Machinist.  
 McCoy & Linn. .... Rolling Mill.

**MILES' GROVE.**

Hopkins & Irwin. .... Iron Founders.

**MILFORD.**

Klein, T. R. J. .... Plumber.  
 Moore, R. F. .... Machinery.  
 Wel's, H. P. .... Machinist.

**MILLBACH.**

Rutter, Jacob.....Machinist.

**MILL BROOK.**Carroll, W. A.....Iron Founder.  
Orwig & Page.....Machinery.**MILL CITY.**

Siekler, H. N.....Iron Founder &amp; Machinist.

**MILL CREEK.**

Goodman, Samuel.....Millwright.

**MILLERSBURG.**

Musser &amp; Schreiber.....Iron Founders.

**MILLERSTOWN (Butler Co.)**Brennan, Wm. J.....Boiler Maker.  
Campbell & Murphy.....Machinists.  
Dale & Larkin.....Machinists.  
McNevin Bros.....Boiler Makers.**MILLERSTOWN (Perry Co.)**

Taylor, S. E.....Iron Founder.

**MILLERVILLE.**

Shank, Samuel B.....Machinist.

**MILL HALL.**Berry Bros.....Iron Founders.  
Mann, R. & Sons.....Mfrs. Axes.**MILLHEIM.**Foote, Jno. D. & Co.....Iron Founders.  
Hartman, R. B.....Iron Founder.**MILL HOLLOW.**Engle, Geo. W.....Iron Founder.  
Mathers, John.....Millwright.**MILLSBORO.**Amons, Joseph M.....Iron Founder.  
Bowell, J. H.....Iron Founder.**MILL VILLAGE.**

Burger, Geo.....Machinist.

**MILROY.**

Greenhoe, Jacob.....Iron Founder &amp; Machinist.

**MILTON.**Bickel & Bailey.....Iron Founders & Machinists.  
Godecharles, C. A. & Co.....Nail Works.  
Milton Gas Fitting & Plumbing Co.  
Milton Iron Co.  
Murray, Dongal & Co.....Boiler Makers.  
Sassaman, J. M.....Machinist.  
Shav, Daniel.....Boiler Maker.  
Shimer & Co.....Machinists.**MILWAUKEE.**

Griffing, Sterling.....Iron Founder &amp; Machinist.

**MINERSVILLE.**Fisher, Jno. L.....Iron Founder.  
Isaacs, J.....Plumber.  
Gartley, Jos. C.....Machinist.**MITCHELLS MILLS.**Long & Sickenberger.....Machinists.  
Rodkey, J. S.....Iron Founder.**MOHN'S STORE.**Krick, Isaac & Co.....Mfrs. Gun Barrels.  
Schnader, Frank.....Mfr. Gun Barrels.**MONONGAHELA CITY.**Abrams, Morrison & Co., Iron Fdrs. & Machinists.  
Downer, J. W.....Plumber.  
Graham E. T.....Iron Founder.  
Keller, G. A.....Iron Founder.  
Monongahela Mfg. Co.....Mfrs. Hoes.  
Morrison & Co.....Mfrs. Hardware.**MONROE.**

McGee, Irwin.....Machinist.

**MONROETON.**

Rockwell, H. W.....Iron Founder.

**MONT ALTO.**

Mont Alto Iron Co.

**MONTGOMERY STATION.**Houston, Levi.....Mfr. Woodworking Machinery.  
Valentine, G. R.....Mfr. Tools.**MONTOURSVILLE.**

Sweely, Moses.....Millwright.

**MONTROSE.**Beach, H. L.....Saw Machinery.  
Crandall & Co.....Mfrs. Saw Blades.  
Susquehanna County Ag'l Works.**MORELAND.**

Lorenson, Henry.....Machinist.

**MORRIS.**

Hoyt Bros.....Machinists.

**MOUNT CARMEL.**

May, Isaac &amp; Co.....Iron, &amp;c.

**MOUNT HOPE.**

Grubb, A. Bates.....Mfr. Iron.

**MOUNT JOY.**Bryan, Thos.....Plumber.  
Greyer & Metzler.....Iron Founders & Machinists.  
Indemuth, H. H.....Plumber.  
Mar-h & Co.....Mfrs. Agl. Implements.  
Root, Daniel, Son, & Co.....Mfrs. Plows.**MOUNT PLEASANT.**Boetz, John H., & Sons.....Iron Founders.  
Lentz, Henry.....Iron Founder.**MT. PLEASANT MILLS.**

Harding, Wm.....Iron Founder.

**MT. UNION.**

Peacock &amp; Thomas.....Mfrs. Iron.

**MOYER.**

Collins, Jefferson.....Machinist.

**MUDDY CREEK FORKS.**

Martin, Samuel.....Machinist.

**MUNCY.**Clapp, Thos.....Iron Founder and Machinist.  
Hartranft & Burkholder.....Iron Founders.  
Sproul, L. B.....Mfr. Hay Forks.  
Trumbower, W. C.....Iron Founder.  
Trumbower, P. M.....Machinist.  
Waldron, John.....Mfr. Hay Forks.**MYERSTOWN.**Gearing, John.....Machinist.  
Miller, Richard A.....Machinist.  
Painter, Joseph.....Iron Founder.  
Tice, David.....Machinist.**NAZARETH.**Henry, James, & Son.....Gun Works.  
Schlabach, R. L.....Iron Founder.**NEFFS P. O.**Hausman, Levi.....Iron Founder.  
Peters & Bro.....Iron Founders & Machinists.**NEW BERLIN.**

Potts, E. F.....Millwright.

**NEW BETHLEHEM.**Hamilton, W. R., & Sons.....Iron Founders.  
O'Donnell, C.....Iron Founder & Machinist.**NEW BLOOMFIELD.**

Waggoner &amp; Shebley.....Iron Founders.

**NEW BRIGHTON.**

Logan & Strobbridge.....Mfrs. Iron Castings.  
 Merrick & Co.....Iron Founders.  
 Pittsburg Chain Co.....Mfrs. Chains.  
 Pittsburg Hinge Co.....Mfrs. Hinges.  
 Standard Horse Nail Co.  
 Waldie & Co.....Mfrs. Chains.

**NEW CASTLE.**

Bradley, Reis & Co.....Mfrs. Iron.  
 Crowther Iron Co.  
 Cunningham, R. W., & Co.....Iron Founders.  
 Downing, J. M.....Mfr. Iron Tubes.  
 Dunlap & Lake.....Plumbers.  
 Etna Iron Works.  
 Keystone Foundry & Stove Works.  
 Lawrence Foundry & Machine Works.  
 Long & Hamilton.....Mfrs. Nut Locks.  
 Mann, Plant & Co.....Iron Founders.  
 Mehard, R. W.....Millwright.  
 Reis Bros.....Mfrs. Sheet & Plate Iron.  
 Robertson, Alex.....Plumber.  
 Shaw, J. R., & Son.....Iron Founders.  
 Shenango Iron Works.  
 Waddington & Shaw.....Iron Founders.  
 White, Wm.....Boiler Maker.  
 Witherow & Gordon.....Iron Founders.

**NEW FLORENCE.**

Gamble, W. H., & Bro.....Millwrights.  
 Snomo, Henry.....Iron Founder.

**NEW FREEDOM.**

Grove, A. H.....Sheet Iron Worker.

**NEW GALILEE.**

Grimm, John.....Machinist.

**NEW GENEVA.**

Moore, Joseph.....Millwright.

**NEW HOLLAND.**

Davis, Isaac.....Iron Works.

**NEWMANSTOWN.**

Hoffman, F. A.....Millwright.  
 Wallace, James.....Mfr. Plows.  
 Yeiser & Shenfelder.....Mfrs. Plows.  
 Zeller, G. H.....Millwright.

**NEW MILFORD.**

Mead, Wm. S.....Iron Founder.

**NEW OXFORD.**

Diehl, Henry.....Iron Founder & Machinist.

**NEWPORT.**

Marshall Bros.....Mfrs. Iron.  
 Thomas, E., & Bro.....Iron Founders.

**NEWPORTVILLE.**

Gaslin, Samuel, & Son.....Machinists.  
 Hibbs, S. B., & Co.....Mfrs. Fifth Wheels.  
 McCorkle, C. H.....Machinist.

**NEW RINGGOLD.**

Kaufman, Wm. M., & Co.....Mfrs. Iron.

**NEW STANTON.**

Fulton, W. D.....Machinist.

**NEWTOWN.**

Buckman & Blaker.....Mfrs. Agl. Impls.  
 Roberts, J. B.....Plumber.  
 Willard, Chas.....Plumber

**NEW TRIPOLI.**

Heintzleman, John.....Machinist.

**NEVVILLE.**

Abrahams, Jacob.....Iron Founder & Machinist.

**NORRISTOWN.**

Boone, J. H.....Rolling Mill.  
 Burgess, Warren S.....Machinist.  
 Cowden, S. L.....Plumber.  
 Elliott, John F.....Iron Founder.  
 Evans, Chas. W.....Plumber.  
 Fagan, R.....Brass Founder.  
 Haslim, John.....Iron Founder.  
 Hooven, J., & Sons.....Mfrs. Bar Iron & Gas Pipe.  
 Link, E. H.....Plumber.  
 Newbold, R. S., & Son.....Iron Founders & Mach'ts.  
 Pennsylvania Tack Works.  
 Plymouth Rolling Mill Co.  
 Rittenhouse, Chris., & Son.....Machinists.  
 Schuylkill Iron Co.....Mfrs. Iron.  
 Standard Iron Works.  
 Streeper & Hutchinson.....Plumbers.

**NORRITONVILLE.**

Heebner, Josiah D.....Machinist.

**NORTH CLARENDON.**

Banser, J. H.....Machinist.  
 Clark, John R.....Machinist.  
 National Tube Works Co.  
 Payne & Shepard.....Machinery.

**NORTH EAST.**

Glass, P.....Iron Founder.

**NORTH HOPE.**

Innis Mfg. Co.....Mfrs. Engines.

**NORTH PENN.**

Snyder, Tilghman B.....Mfr. Agl. Impls.

**NORTHUMBERLAND.**

Van Alen & Co.....Rolling Mill.

**NORTH WALES.**

Durrin, Thomas.....Iron Founder.  
 Jones, Edward A.....Machinery.  
 Leister, Jacob.....Iron, &c.

**OAKDALE STATION.**

Oakdale Agl. Works.

**OAKFORD.**

Vansant, Jonathan.....Mfr. Rakes.

**OIL CITY.**

Bookhammer, H. J. Buffalo, Pittsburg & Western  
 R. R.  
 Carson, J. M., & Co.....Plumbers.  
 Cummings Bros.....Machinists.  
 Geigels, F. G.....Plumber.  
 Goodwin, O. B.....Machinery.  
 Innis Mfg. Co.....Iron Founders & Machinists.  
 Jessup, S. W.....Machinist.  
 Logan, Robert.....Machinery, &c.  
 McDonald & Heffman.....Boiler Makers.  
 Mount & Kugler.....Machinists.  
 Naylor, R. D.....Plumber.  
 Oil City Boiler Work.....Mfrs. Boilers, Engines, &c.  
 Reed, Joseph.....Machinist.  
 Robinson, J. H.....Plumber, Gas & Steam Fitter.

**OLD FORGE.**

Miller, S. H.....Iron Founder.

**OLNEY.**

Yoder, Martin.....Machinist.

**ORANGEVILLE.**

White & Connor.....Iron Founders.

**OSCEOLA.**

Osceola Mfg. Co.....Iron Founders.  
 Pie, J. J.....Iron Founder & Machinist.  
 Shoff, A. J.....Mfr. Tools.  
 Stine, Samuel.....Machinist.

**OXFORD.**

Collom, Jesse.....Mfr. Augers.  
 Collom, John.....Mfr. Augers.  
 Collom, John F.....Mfr. Augers.  
 Collom, R. K.....Mfr. Augers.  
 Jackson, James W.....Mfr. Edge Tools.  
 Krauss, S.....Iron Founder.

**OXFORD—Continued.**

Slack, T.....Mfr. Augers.  
Strickland, T.....Mfr. Augers.  
Worth, Henry S.....Iron, &c.

**PACKERSTON.**

Lentz, J.....Geneva, Ithaca & Sayre R. R.

**PALMYRA.**

Seibert, Jno.....Millwright.  
Stahle, Wm.....Machinist.

**PARKER'S LANDING.**

Bradley & Duff.....Machinists.  
Johnson, R.....Plumber.  
Tinsman & Russell.....Machinists.  
Vanderbosh, Jno.....Boiler Maker

**PARKESBURG.**

Parkesburg Iron Co.

**PATTONVILLE.**

Fisher, H. H.....Millwright.

**PAXINOS.**

Berninger, Israel.....Millwright.

**PAXTONVILLE.**

Martin, Jno.....Millwright.

**PECKVILLE.**

White, S. F., & Son.....Iron Founders & Machinists.

**PENCOYD.**

Roberts, A. & P. & Co.....Rolling Mill.

**PENNSBURG.**

Kriebel, John.....Millwright.

**PERU MILLS.**

Still, Robert.....Millwright.

**PETERSBURG.**

Slack, Jno.....Iron Founder.

**PETER'S CREEK.**

Hewes, G. H.....Mfr. Edge Tools.

**PETROLEUM CENTRE.**

Betts, Wm.....Machinist.  
Gross, Sebastian.....Boiler Maker.

**PETROLIA.**

Ireland & Hughes.....Machinists.  
Lyon, J. C.....Boiler Maker.  
Murdock & Price.....Machinists.  
Price, A. C.....Machinist.  
Quinn & Co.....Boiler Makers.  
Yeager, Samuel.....Boiler Maker.

**PHILADELPHIA.**

**BOILER MAKERS.**

Babecock & Wilcox Co.....32 N. 5th.  
Baizley, John.....522 S. Delaware Av.  
Burr, W. H.....126 Reed.  
Cardell, James D.....1900 Passvunk Av.  
Cox & Sons.....304 N. 4th.  
Cummings & Myers.....607 Cherry.  
Deily, Henry.....1826 Germantown Av.  
Deily & Fowler.....39 Laurel.  
Downes, A. N. & Co.....308 N. 3d.  
Duplaine, B. C.....Beach, cor. Vienna.  
Fisher, William.....1906 N. 5th.  
Gilman, Ambrose.....1110 Beach.  
Griffenberg, David J. M.....249 N. 15th.  
Guynan, R. H.....1436 Callowhill.  
Harrison Boiler Works.....N. 15th, cor. Wood.  
Hibbs, Jos. G., Jr.....112 Bread.  
Hoff, Fontaine & Abbott.....1182 N. 3rd.  
Moore, James.....N. 16th, cor. Buttonwood.  
Morris, I. P. Co., The.....1057 Richmond.  
Myers, George.....204 N. Broad.  
Neafie & Levy.....1365 Beach.  
Patton, James M.....1002 S. 6th.  
Scott, John & Co.....1405 N. Front.  
Sidebotham & Powell.....Frankford Av. n Creek,  
Frankford.  
Swain, R. A.....1173 S. 9th.  
Weyant, Geo. W.....1117 Marlborough.

**PHILADELPHIA—Continued.**

Wilfong, Isaac N., Jr.....222 N. 23d.  
Zeh, John.....1630 N. 9th.  
Zeigler, Martin.....1056 New Market.

**BRASS FOUNDERS AND MANUFACTURERS.**

Bauer & Smith.....218 N. 2nd.  
Belfield, H. & Co.....435 N. Broad.  
Benedict & Burnham Mfg. Co.....17 N. 7th.  
Bickley, H. T.....703 Chestnut.  
Bowman, Job K.....934 Race.  
Bradford, John.....722 Gordon.  
Bradshaw, James T.....951 Beach.  
Bureau, Bros. & Heaton.....1109 Buttonwood.  
Cairns, Jas. & Co.....309 N. 9th.  
Cavins, James & Co.....909 N. 9th.  
Clay, John H.....1320 Ridge Av.  
Colkett, Geo. H. & Co.....1432 Callowhill.  
Conard & Murray.....S. 30th, nr. Chestnut.  
Cooper, Jones & Cadbury.....1136 Ridge Ave.  
Creswell, David S.....816 Race.  
Cre-well, S. J.....Cherry, cor. N. 23d.  
Croft, Samuel.....528 Cherry.  
Davey, Sarah.....513 Vine.  
Deakin, Robert S. & Co.....N. 12th cor. Buttonwood.  
Durrin & Co.....524 Walnut.  
Elkins Mfg. & Gas Co.....617 Arch.  
Ford, Lewis.....212 Dock.  
Fowler, Thos. A.....621 N. 4th.  
Frick, Geo. L.....617 Hermitage.  
Frost, Silas F.....55 N. 7th.  
Fullerton, John.....1243 Shackamaxon.  
Goulds' M. Sons & Co.....8 N. 6th.  
Hall & Lindsay.....121 Craven.  
Halstead & Spencer.....1129 Cherry.  
Homer & Poole.....231 Race.  
Hooks Smelting Co.....N. Broad cor. Hamilton.  
Jones, J. & H. Co.....218 N. 2nd.  
Kirk Bros.....118 Canal.  
Knight, Geo. W.....141 Master.  
Lapp, Davis C.....631 Filbert.  
Ledig & Herlein.....821 Cherry.  
Lonergan, J. E. & Co.....243 Arch.  
McCambridge & Co.....527 Cherry.  
Macneir, Leonidas.....55 N. 7th.  
Melzer, Emil.....205 Quarry.  
Merchant & Co.....525 Arch.  
Miller & Krips.....716 Cherry.  
Mosley, Charles.....1241 Howard.  
Ot, Geo. F.....207 Buttonwood.  
Perkes, Charles.....627 Arch.  
Philadelphia Smelting Co.....415 N. 12th.  
Reeves, Paul S.....760 S. Broad.  
Saville, Thomas.....1231 Buddens Al.  
Schandain, J. Wm.....114 S. 2d.  
Talmage & Weidler.....239 N. 15th.  
Taws & Hartman.....1235 N. Front.  
United States Smelting Works.....1615 Spring Gar-  
de.  
White & Bro.....1610 Vienna.  
White, Samuel.....1729 S. 6th.  
Wiechardt & Mingle.....N. 5th cor. Berks.  
Wight, Edwin.....627 Filbert.

**FILE MFRS.**

Barnett, G. & H.....39 Richmond.  
C. rley & Condell.....4550 Germantown Ave.  
Disston, Henry & Sons.....Tacony.  
Henssler, Christian.....428 Ireland.  
Hodkinson, Wm. V.....2446 Alder.  
Hoffman, C. & A.....Adams, cor. Kensington Ave.  
Fkd.  
Knighton, Wm.....152 Allen.  
Krumhaar, Alexander.....1601 Spring Garden.  
Phelps, John D.....1141 Germantown Ave.  
Scheifele, Jacob.....909 Charlotte.  
Smith, J. Barton Co.....4th & Somerset.  
Steinbeck & Bro.....3221 Germantown Ave.  
Weed, A. & Co.....1605 Spring Garden.  
Widmer, Ulrich.....1347 Crease.

**HARDWARE MANUFACTURERS.**

American Machine Co.....Lehigh Av., cor. Amer.  
Brewer, D. & Co.....42 N. 6th.  
Chalfant Mfg. Co.....109 N. 4th.  
Enterprise Mfg. Co.....Dauphin, cor. American.  
Essex Mfg. Co.....N. 17th, cor. Indiana Av.  
Griffiths, Geo.....511 Locust.

## PHILADELPHIA—Continued.

Hillebrand & Wolf.....	110 S. 8th.
Pfeiffer, J. & Co.....	224 Race.
Philadelphia Novelty Mfg. Co.....	321 Cherry.
Reading Hardware Co.....	514 Commerce.
Rowland, B. & Co.....	115 Commerce.
Rowland, Maxwell & Co.....	503 Commerce.
Russell & Irwin Mfg. Co.....	425 Market.
Southwark Hardware Co., cor. 2d and Washington	
Stewart & Mattson.....	14 N. 6th.
Wiener, Edward.....	415 St. John.

## IRON DEALERS.

Andenreid, S.....	132 Walnut.
Bailey, J. F. & Co.....	216 S. 4th.
Harr, W. J.....	407 Library.
Bertolet Bros.....	961 N. 9th.
Bertolet, Ezra.....	411 Walnut.
Burkhart, W. I.....	60 N. Front.
Conn, J. H. & W. J.....	246 Girard Av.
Cox, Justice, Jr., & Co.....	224 Walnut.
Cranberry Iron & Coal Co (Ore).....	273 S. 3rd.
Cumberland Nail and Iron Co., 44 N. Delaware Av.	
Dallett & Co.....	127 S. 4th.
Daniel M. & Bro.....	1216 Vienna.
Day Bros.....	419 N. 2nd.
Donnelly, James.....	1831 N. 5th.
Drake, Clement F.....	269 S. 4th.
Earnshaw, Alfred.....	203 Walnut Place.
Ely & Williams.....	1232 Market.
Etting, E. J.....	230 S. 3rd st.
Fisher & Ross.....	343 S. Front.
Gillingham, Herbert F.....	1015 N. Front.
Graushach, H. & Co.....	336 York Av.
Hall & Carpenter.....	709 Market.
Hand, James C. & Co.....	614 Market.
Heberton & Co.....	333 Walnut.
Hoffman, J. W. & Co.....	208 S. 4th.
Hoopes, David J.....	238 Market.
Hoopes, W. G.....	206 Walnut Place.
Hunter, Nicholas.....	228 Dock.
Keeley, Jerome & Co.....	206 Walnut Place.
Kent, D. H. & Co.....	1009 Arch.
Knight, C. C. & Bros.....	301 N. 2nd.
Lee, J. Tatnall & Co.....	400 Chestnut.
Levis, Henry & Co.....	234 S. 4th.
Liggett, Robert & Co.....	1201 Market.
Lippincott, Chas. K. & Co.....	426 N. 11th.
Lyman & Co.....	319 Willings al.
Matthews, C. W.....	3rd, below Walnut.
McDaniel & Harvey Co.....	S. 16th, cor. Washington Av.
Middleton, C. W. & H. W.....	945 Ridge Av.
Middleton & Saul.....	118 Pegg.
Mohr, J. Jacob.....	430 Walnut.
Montour Iron and Steel Co.....	208 S. 4th.
Moore, Snively & Co.....	208 Walnut Place.
Morris, Wheeler & Co.....	1608 Market, & 400 Chestnut.
Naylor & Co.....	208 S. 4th.
Ormsby, Henry G.....	58 Chancery Lane.
Potts, Albert.....	234 N. Front.
Potts, Horace T.....	212 N. 2nd.
Potts, W. F. Son & Co.....	1225 Market.
Purves, A. & Son.....	17 South.
Reed, Joseph P. & Co.....	265 S. 4th.
Richardson, James O.....	232 Dock.
Samuel, Edward & Co.....	334 Walnut.
Seybert, L. F.....	437 N. 3d.
Sharpless, S. Frank.....	333 Walnut.
Ghimier & Co.....	250 S. 3rd.
Simon & Wilson.....	1932 N. 2nd.
Stevens, John B.....	1330 N. 6th.
Taylor N. & G. Co.....	342 Branch.
Waterman, Isaac L.....	407 Library.
Whitaker, W. M.....	52 N. Front.
Wilson, Joseph B.....	349 Walnut.
Wister, Fisher & Fox.....	230 S. 4th.
Wister, L. & R.....	230 S. 4th.
Wood, Alan & Co.....	519 Arch.
Wood, J. & Bros.....	223 N. 2nd.

## IRON FOUNDERS.

Adams & Storrie.....	960 N. 9th.
Baldwin Locomotive Works.....	500 N. Broad.
Barrow, Savery & Co.....	S. W. cor. Front & Reed.
Belfield, H. & Co.....	435 N. Broad.
Bing, Geo. W.....	1516 Spring Garden.

## PHILADELPHIA—Continued.

Bradshaw, James T.....	951 Beach.
Buckley, Edward S.....	209 S. 3rd.
Burpee, Thos. B. C.....	1628 N. 9th.
Car Wheel Iron Co.....	400 Chestnut.
Carr & Crawley.....	N. 9th, cor. Jefferson.
Cassin, I. S. & Co.....	N. 2nd, cor. Germantown Av.
Chambers, Bro. & Co.....	N. 52nd, nr. Lancaster Av.
Cline & Co.....	E. York, cor. Thompson.
Columbian Iron Works.....	639 Arch.
Conard & Murray.....	S. 30th, nr. Chestnut.
Cowan, John A.....	S. 27th, cor. Oakford.
Creswell, David S.....	816 Race.
Creswell, Samuel J.....	Cherry, cor. N. 23rd.
Dawson, John I. & Bro.....	S. 30th, cor. Grays Ferry Rd.
Delly & Fowler.....	39 Laurel.
Ellis, T. & Bro.....	2303 Coral.
Feltes, W. J. & Co.....	404 N. 12th.
Flagg, Stanley G. & Co.....	N. 19th, cor. Penna. Av.
Flesh, Francis P.....	2012 N. 10th.
Gloucester Iron Works.....	6 N. 7th.
Goodell & Waters.....	31st & Chestnut.
Green & Linehan.....	Mill, nr. Frankford Av., Fkd.
Griffith, Philip.....	119 Craven.
Hitzereth, C.....	3124 Market.
Hoff, Fontaine & Abbott.....	1162 N. 3rd.
Johnson, James & Co.....	Frankford, nr. Creek, Fkd.
Jones, Jeremiah C.....	441 N. Broad.
Kyser & Rex.....	Trenton Av., cor. Margareta, Frankford.
Lanning, James.....	Passyunk Av., nr. Federal.
Leibrandt & McDowell Stove Co.....	E. Girard Av., cor. Ash.
Lindsay & Gray.....	Church, nr. Hamilton, Myk.
London, Berry & Orton.....	1225 S. 28th.
May, Joseph.....	1228 Hamilton.
Mitchell & Sheppard.....	2049 Marshall.
Moore, James.....	N. 16th, cor. Buttonwood.
Morris, I. P. Co., The.....	1057 Richmond.
Morris, Tasker & Co., Limited.....	5th, cor. Tasker.
Muldoon & Bramble.....	Main, nr. Centre.
Naylor, Jacob.....	Girard Av., cor. N. Front.
Neafie & Levy.....	1365 Beach.
Noble, Jas. & Co.....	416 Brown.
North Bros.....	N. 23rd, cor. Race.
Perkins, Henry A.....	2307 Wood.
Rebmann & Ruhland.....	1410 N. 22nd.
Roeper, John.....	1633 N. 5th.
Royer Bros.....	Montgomery Av., cor. N. 9th.
Sheppard, Isaac A. & Co.....	1801 N. 4th.
Smith, S. Decatur.....	Moyer, cor. E. York.
Southwark Foundry & Machine Co.....	S. E. cor. 5th & Washington Av.
Steward, W. P. & Co.....	801 Washington Av.
Stokes & Parrish.....	30th, cor. Chestnut.
Stuart, Peterson & Co.....	N. Broad, cor. Noble.
Thomas, Roberts, Stevenson & Co.....	S. 2nd, cor. Mifflin.
Tilghman, B. C. & R. A.....	1120 S. 11th.
Union Iron Foundry.....	N. 2nd, cor. Germantown Av.
Walker, Bros. & Co.....	2227 Wood.
Way, Joseph.....	1228 Hamilton.
Wharton, Joseph S. L.....	N. 15th, cor. Wood.
Wilbraham Bros.....	2320 Frankford Av.
Wood, R. D. & Co.....	400 Chestnut.
Yocum, James & Son.....	111 Drinker.

## IRON MANUFACTURERS.

Allentown Iron Co., (Pig).....	230 S. 3rd.
Allentown Rolling Mills.....	37 S. 3rd.
American Combined Iron & Steel Co.....	273 S. 4th.
Anderson Iron Co., (Pig).....	407 Walnut.
Aradia Iron Works Co.....	417 Walnut.
Blair Iron & Coal Co.....	218 S. 4th.
Bloomsburg Iron Co.....	12 Race.
Cambria Iron Co.....	218 S. 4th.
Carter, W. T. & Co.....	302 Wain st.
Central Virginia Iron Co.....	208 S. 4th.
Combination Trust Co.....	1003 Chestnut.
Cranberry Iron Coal Co.....	237 S. 3rd.
Crane Iron Co., (Pig).....	224 S. 4th.
Delaware Rolling Mill.....	436 Walnut.
Devlin, Thos. & Co.....	Lehigh av. cor. American.
Duncannon Iron Co.....	122 Race.
Fulton, Samuel.....	265 S. 4th.
Gaulbert, McFadden & Caskey.....	American cor. Yk.
Glamorgan Iron Co., (Pig).....	265 S. 4th.



## PHILADELPHIA—Continued.

Gloucester Iron Works .....	6 N. 7th.
Greenwood Rolling Mill Co. ....	230 S. 3rd.
Grubb, C. B. & Son .....	333 Walnut.
Hilleman, Haack & Graebel .....	922 N. Front.
Hughes & Patterson .....	300 Richmond.
Keenan, Patrick .....	1702 N. 4th.
Longdale Iron Co., (Pig) .....	237 S. 3rd.
Lynchburg Iron Co. ....	235 Dock.
McCullough Iron Co. ....	16th cor. Washington.
McDaniel & Harvey Co. ....	S. 16th cor. W'gton ave.
Mattinger Bros. ....	1230 R. ce.
Moore, James .....	N. 16th cor. Buttonwood.
Moorehead, J. B. & Co., (Pig) .....	315 Willings al.
Musconetong Iron Works .....	37 S. 3rd.
Ogden Iron Co., (Ore) .....	237 S. 3rd.
Peacock & Thomas .....	256 S. 3rd.
Pennsylvania & Virginia Iron & Coal Co. ....	407 Walnut.
Pegua Iron Co. ....	202 Walnut pl.
Philadelphia Iron & Steel Co. ....	339 N. Delaware av.
Phoenix Iron Co. ....	410 Walnut.
Reading Iron Works .....	261 S. 4th.
Robbins, S. & Son .....	Beach below Vienna.
Roberts, A. & P. & Co. ....	265 S. 4th.
Rockhill Iron & Coal Co., (Pig) .....	320 Walnut.
Rowland, J. & Co. ....	928 N. Delaware ave.
Schuylkill Iron Co. ....	430 Walnut.
Watts, Twell- & Co., (Pig) .....	326 Walnut.
Wood, Alan & Co. ....	519 Arch.
Wood, R. D. & Co. ....	400 Chestnut.
Wood, J. & Bros .....	223 N. 2nd.
Winch, Corydon .....	Canal nr. Germantown ave.

## IRON PIPE MANUFACTURERS.

Allison, W. C. ....	S. 32nd cor. Walnut.
Brown & Owen .....	436 N. 1 th.
Cassin, I. S. & Co. ....	N. 2nd cor. Germantown ave.
Chester Pipe & Tube Co. ....	265 S. 4th.
Ford & Kendig .....	Callowhill above Broad.
Getze & Reeves, (Agents) .....	7 N. 5th.
Hunter & Dick-on .....	243 Arch.
Maneely, John .....	119 N. 4th.
Morris, Tasker & Co., (Lim.) .....	S. 5th cor. Tasker.
Pancoast & Maule .....	243 S. 3rd.
Whetstone & Co. ....	107 N. 3rd.
Wood, R. D. & Co. ....	400 Chestnut.

## IRON RAILINGS DOORS, ETC., MFRS.

Bancroft, Reuben F. & son. ....	810 Sansom.
Crowell & Co., M. ....	1606 N. 19th.
Fechter, L. M. ....	942 St. John.
Kinney, R. D. & Co. ....	2217 Chestnut.
Lewis, Daniel .....	2313 N. 8th.
McArdle, W. H. & Son .....	513 Bainbridge.
Manley & Cooper Mfg. Co. ....	42nd and Elm.
Murphy & Murray .....	1114 Market.
Perot, Ellison L. ....	27 S. 2d.
Pettit, David & Co. ....	1107 Buttonwood.
Powell, A. G. & Co. ....	829 Willow.
Robinson, J. S. ....	1003 Hancock, Germantown.
Sobers, Jacob .....	1121 St. John.
Thorn, J. S. ....	1203 Callowhill.
Wickersham, Jno. B. ....	505 Cherry.

## MACHINERY DEALERS.

Abbott, Walter S. ....	132 N. 2d.
Ackley, Myers F. ....	1416 Washington Ave.
Asay & Wood .....	3339 Market.
Bo-son, John D. ....	22 Strawberry.
Bowman, Henry L. ....	43 South 4th.
Bradford, Hsekiah .....	4004 N. 22d.
Bridgesburg Mfg. Co. ....	201 Chestnut.
Brooks, A. G. & Winebrenner .....	261 N. 3d.
Burr, Parke & Parke .....	288.15th.
Comly, James .....	4741 Paul, Fkd.
Cordingley, James .....	1752 N. 2d.
Derbyshire, W. J. ....	2044 N. Front.
Downes, A. N. & Co. ....	308 N. 3d.
Furbush, M. A. & S. n. ....	Columbia Ave cor. 9th.
Furey, W. T. ....	110 Spruce.
Gleason, John .....	Diamond cor. N. 2d.
Gourlay, W. N. ....	43 S. 4th.
Granger, A. O. & Co. ....	22 North 4th.
Greaves, Charles .....	109 N. Front.
Greiss, Adam .....	N. 2d cor. Diam. nd.
Hey, Michael .....	N. 3d cor. Fairmount Ave.
Hill, Edmund & Co. ....	256 N. Broad.

## PHI' ADELPHIA—Continued.

Hodson G. & J. ....	226 Arch.
Howell, E. I. H. ....	49 N. 7th.
Imlay, Chas. G. ....	312 Stock Exchange Pl.
Imlay, Wm. L. ....	312 Stock Exchange Place.
Kelley & Ludwig .....	49 N. 3d.
Kerr, W. J. ....	135 N. 3d.
Kester, & Pechin .....	204 N. 3d.
Leech, Charles .....	1316 S. 6th.
Lumly, Joseph .....	144 N. 3d.
Myers, Chas. W. ....	277 Lodge.
Nuttall, John .....	1734 N. 5th.
Peel, William .....	223 N. Front.
Pusey Bros. ....	216 Chestnut.
Rexford, R. W. ....	11 N. 6th.
Schofield, John .....	106 Arch.
Schuckers, Jacob W. ....	118 S. 4th.
Siegmán, E. W. ....	256 N. Broad.
Smith, Geo. A. ....	17 S. 4th.
Sm th, Joseph R. ....	124 Exchange Place.
Smith, H. B. Machine Co. ....	925 Market.
Storer, G. W. ....	149 N. 3rd.
Surplee, Thos. R. ....	149 N. 3rd.
Tallman & McFadden .....	607 Market.
Teter & Allen .....	410 Marshall.
Thomas, Ervin .....	1114 Frankford Av.
Toomey, Frank & Co. ....	131 N. 3rd.
Walker Bros. & Co. ....	2227 Wood.
Weid, A. & Co. ....	1605 Spring Garden.

## MACHINISTS.

Altemus, W. W. ....	1124 Hancock.
Anderson, Charles A. ....	3233 Market.
Anderson, John P. & Co. ....	629 Filbert.
Archambault, A. L. ....	Beach, cor. Marlborough.
Baizley, John .....	514 S. Del. Av.
Baldwin Locomotive Works .....	500 N. Broad.
Barker & Berston .....	2509 Knorr.
Batt, Richard .....	407 Columbia Av.
Bayler, Adolph .....	333 York Av.
Bement, W. B. & Son .....	Callowhill cor. N. 21st.
Berkholz, John .....	1321 N. 11th.
Bing, Geo. W. ....	1516 Spring Garden.
Bl-hor, Robert .....	Edward cor. Hancock.
Blake & Walton .....	1023 Germantown Av.
Blanchard Hosiery Machine Co. ....	916 Chestnut.
Blummer, Henry C. ....	512 Vine.
Box, Alfred & Co. ....	314 Green.
Fraun, John .....	1615 N. 25th.
Braun-on, Jas. L. ....	505 Chestnut.
Brehmer Bros. ....	440 N. 12th.
Bridesburg Mfg. Co. ....	1020 Hunter.
Brown, Samuel .....	1020 Hunter.
Browning, Robt. S. ....	Franklin nr. Arrol, Fkd.
Buehler, Geo. M. ....	135 Pegg.
Bullock, Chas. K. ....	1357 Ridge Av.
Burk, Henry .....	409 Cherry.
Butterworth, H. W. & Son .....	E. York cor. Cedar.
Butterworth, James & Son .....	262 Adams.
Campbell & Rickards .....	Howard cor. Huntingdon.
Carnell, George .....	1819 N. 5th.
Carr, Lewis G. ....	Trenton Av. cor. Adams.
Cass-in, I. S. & Co. ....	N. 2nd cor. Germantown Av.
Chambers, Bro. & Co. ....	N. 52nd nr. Lancaster Av.
Champion Brick Machine Co. ....	148 S. 4th.
Clay, Clemens .....	1320 Ridge Av.
Colladay, Joseph O. & Bro. ....	526 Cherry.
Conde, C. A. & Co. ....	1337 Buttonwood.
Cramp, W. & Son .....	Beach rear Norris.
Cresson, Geo. V. ....	N. 18th cor. Hamilton.
Culp, A. J. & Co. ....	421 Masher.
Davey, Thomas .....	1225 Noble.
Deily & Fowler .....	39 Laurel.
Denn, Clayton .....	Worth nr. Oxford, Frankfd.
Diebel & Knopf .....	2304 Waterloo.
Dienelt & Eisenhardt .....	1306 Howard.
Dietrich Bros. ....	506 St. John.
Doelltor, Frederick .....	347 N. 4th.
Dougherty, James .....	N. 24th cor. Wood.
Eccles, James .....	Taylor cor. Amber.
Ellis & Bro. ....	2203 Coral.
Ervin, Chas. W. & Co. ....	420 Ireland.
Evans, Chas. & Son .....	207 Quarry.
Evans, John .....	N. 13th nr. Buttonwood.
Farr, Lorenzo B. ....	21 Mill, Germantown.
Farrell, John .....	1739 N. Front.
Felch, Andrew L. ....	318 Moore.
Ferrell & Muckle .....	110 S. 6th.

## PHILADELPHIA—Continued.

Flanders Machine Works.....	1025 Hamilton.
Franklin Machine Shop.....	517 Minor.
Furbush, M. A. & Sons.....	Columbia Ave. nr. 9th.
Gabriel, H. S.....	3049 Chestnut.
Gilbach, Geo. F.....	1701 Brown.
Gilbert, David & Son.....	212 Chester.
Gleason, John.....	Diamond cor. N. 2d.
Gleason, E. & F.....	Susquehanna Ave. cor. American.
Gomersall, Alfred.....	4555 Lena, Germantown.
Gomersall, James H.....	Ashmead near German- town Ave., Germantown.
Goodell & Waters.....	S. 31st cor. Chestnut.
Gordon, W. G.....	235 Broad.
Gray, J. Hammond.....	1506 Penna. Ave.
Greiss, Adam.....	2109 N. 2d.
Grison & Co.....	110 S. 4th.
Haas & Parsons Co.....	Poplar cor. N. 26th.
Haise, John A.....	114 Vanhorn.
Haggenmiller, L. & Bro.....	827 N. 4th.
Hall, Henry M.....	639 Arch.
Halton, Thomas.....	E. Huntingdon, near Ken- sington Ave.
Harrington, Edwin & Son.....	N. 15th cor. Penna. Ave.
Harrison, W. H.....	1710 Barker.
Harnett, Richard W. & Bros.....	52 N. 6th.
Hawthorne, Tho.....	1610 Philip.
Heginbotham, Joseph.....	124 E. Cumberland.
Helfrich, J. W.....	Lancaster Ave. cor. Spring Gar- den.
Henshall, James & Son.....	1114 Beach.
Henwood, John.....	2508 Callowhill.
Heys, Robert.....	4075 Pulaski Ave. Germantown.
Hillman, Haack & Graebel.....	922 N. Front.
Hoff, Fontaine & Abbott.....	1162 N. 3d.
Hollingsworth, R. J.....	123 Craven.
Howard, Geo. C.....	S. 18th near Market.
Jackson, Geo. F.....	172 Norris.
Johnson, I. H. Jr. & Co.....	440 N. 12th.
Johnson, Joseph.....	3615 Ridge Av.
Justice, Lemuel B.....	495 St. John.
Kay, Wm.....	718 Dock.
Klein, Chas. C.....	525 Susquehanna Av.
Kreider, Campbell & Co.....	1030 Germantown Av.
Leech, Chas.....	1321 Passyunk Av.
Lillev & Hillsley.....	239 Coral.
Lindley, Geo. W., Jr.....	4550 Wakefield, Gtn.
Lindsay, Hyde & Co.....	531 E. York.
Lithgow, David.....	212 Dock.
Lodge, Jacob & Son.....	113 Hudson.
London, Berry & Orton.....	N. 22d, nr. Arch.
Loudon, Bartholomew G.....	229 Vine.
Lynde, John D.....	1 Fetter Lane.
Lyons, Charles H.....	607 Commerce.
McHenry, S.....	927 Filbert.
Maloney, Philip S.....	1026 Hunter.
Mason, Alva.....	113 Dock.
McCutchen, Jesse G.....	1060 Germantown Av.
Mellor, Chas. H.....	448 N. 12th.
Middleton, E. H.....	Hedge, cor. Gillingham.
Miles, F. B.....	N. 24th, cor. Wood.
Miller, E. L.....	231 Vine.
Miller, Sprowles & Co.....	234 S. 5th.
Mills, Thos. & Bro.....	1301 N. 8th.
Mitchell, J. Henry.....	604 Beach.
Mitchell & Doughty.....	216 N. 23rd.
Montgomery, Robert W.....	2023 Brown.
Moore, James.....	N. 16th, cor. Buttonwood.
Moorhouse, R. O. & Co.....	500 N. 13th.
Morris, I. P. Co., The.....	1057 Richmond.
Morris, Tasker & Co, Limited.....	5th, cor. Tasker.
Muldoon & Bramble, Main, nr. Centre, Manayunk.	
Mutual Machine Works.....	Oxford, cor. Hedge.
Naylor, Jacob.....	Girard Av., cor. N. Front.
Neafie & Levy.....	1365 Beach.
Newsham & Nock.....	130 Reed.
Newton, Chas. C.....	2343 Callowhill.
Nicholas, W. W.....	500 N. 12th.
Nittinger, August, Jr.....	826 N. 4th.
Noble, Henry A.....	203 Dock.
Oat, Charles C.....	13 Fetter Lane.
Orr, Hess & Morgan.....	1219 Callowhill.
Orum, Morris L.....	448 N. 12th.
Parham, Chas.....	712 Cherry.
Parker, Samuel.....	154 Chelten Av., Gtn.
Pe rless Mfg. Co.....	1411 Vine.
Pedrick & Ayer.....	1025 Hamilton.

## PHILADELPHIA—Continued.

Pennsylvania Diamond Drill Co.....	110 S. 4th.
Philadelphia Hydraulic Works.....	Evelina, cor. Levant.
Philadelphia Machinery Co., 19th & Columbia Ave.	
Phillips, C. C.....	452 N. 13th.
Pike, L. Dean.....	122 N. 6th.
Pincus & Hellings.....	1900 Marshall.
Platt, Bros. & Co.....	34 Letitia.
Pulen, Geo. B.....	610 Jayne.
Powell, John G.....	1210 Market.
Power, L. & Co.....	3003 Chestnut.
Rehfuss, Geo. & Sons.....	1315 Tierman.
Rex & Bockius.....	614 Filbert.
Reid, Robert.....	46 Canal.
Rich, John & George.....	120 N. 6th.
Ridings, P. J.....	1535 Fitzwater.
Riebel, Frederick.....	809 N. 4th.
Riehl & Clark.....	1130 Charlotte.
Roanoke Machine Works.....	37 S. 3rd.
Rue Mfg Co.....	9th ab. Cherry.
Ruoff, Wm.....	131 Green.
Rust, Alfred J.....	Trenton Av. cor. Adams.
Rutschman Bros.....	Berks cor. Manor.
Sale, Jacob.....	607 Cherry.
Saul, Robert B.....	Willow nr. Delaware Av.
Schields & Chewing.....	332 Noble.
Schleicher, Schumm & Co.....	33d & Walnut.
Schmidt, Edward.....	315 Vine.
Schofield, Wm.....	Green Lane cor. Wood.
Schutte & Goehring.....	N. 12th cor. Thompson.
Scott, John A.....	316 Ella.
Sellers, Wm. & Co.....	1000 Hamilton.
Shirlcliff, Chas.....	N. 2nd cor. Norris.
Shore Bros.....	59 Mill, Germantown.
Sidebotham & Powell.....	Fk'd. Av. nr. Creek Fk'd.
Smith, James Woolen Machinery Co.....	41 Race.
Smith, Walter & Co.....	504 Master.
Snediker & Carr.....	723 Jayne.
Snyder, Edward.....	508 St. John.
Soley, W. H.....	113 Foulkrod.
Somerset, J. L. & Son.....	1207 Hamilton.
Southark Foundry & Machine Co.....	S. E. cor. 5th & Washington Av.
Spless, Philip.....	2215 N. 2nd.
Spoehr, F.....	1137 N. 3rd.
Sprague, Wm.....	628 Filbert.
Stokes & Parrish.....	S. 30th cor. Chestnut.
Stow Flexible Shaft Co.....	1505 Penna. Ave.
Taws & Hartman.....	1235 N. Front.
Tetlow, Wm.....	1642 Cadwalader.
Thorne, De Haven & Co.....	N. 21st nr. Market.
Tracy, E.....	511 N. 12th.
Uhlinger, W. P.....	30 E. Canal.
Veerkamp & Leopold.....	1505 Penna. Av.
Wadsworth, J. & Co.....	541 Sergeant.
Walker Bros.....	75 Laurel.
Walker Bros. & Co.....	2227 Wood.
Walters, Geo. C.....	1316 Ellsworth.
Walton, John.....	208 N. 2nd.
Waples, W. W.....	1424 Beach.
Watson, Andrew.....	537 Dickinson.
Watson, James.....	1612 S. Front.
Watson & McDaniels.....	248 N. 8th.
Weilding, W. H.....	1513 Parrish.
Wilbraham Bros.....	2320 Frankford Ave.
Williamson Bros.....	York cor. Richmond.
Wood, Thomas.....	2106 Wood.
Wrightson & Harley.....	2302 Water-loo.
Yates, John.....	418 Vine.
Yockel, Chas., & Co.....	317 Cherry.
Zindgraff, Geo. P.....	215 Race.

## MACHINISTS' SUPPLIES.

Abbott, Walter S.....	132 N. Third.
Andreas, Hiram.....	22 N. Fourth.
Bickerton, T. B., & Co.....	12 S. Fourth.
Bowman, H. L.....	43 S. 4th.
Brewer, D. & Co.....	42 N. 6th.
Brooks, A. G. & Winebrenner.....	261 N. 3d.
Clark & Burr.....	06 N. Fourth.
Green, William H.....	1 S. Front.
Harrington, Edwin, & Son.....	N. 15th cor. Penna. Av.
Lovegrove & Co.....	152 N. Third.
Rexford, R. W.....	11 N. Sixth.
Sellers, Wm. & Co.....	1600 Hamilton.
Smith, H. B. Machine Co.....	925 Market.
Smith Machinery Co.....	126 N. 3d.

## PHILADELPHIA—Continued.

Tallman & McFadden.....	607 Market.
Watson, James S. & Son.....	512 Commerce.
Williams & Cassidy.....	26 S. 4th.

## PATTERN &amp; MODEL MAKERS.

Allen, Geo. R.....	1305 Buttonwood.
Caley, Edward L.....	526 Cherry.
Deplanque, Richard F.....	1303 Race.
Dill, Oliver I.....	406 N. Tenth.
Ha-lam, Wm.....	812 Race.
Hunter, Thos. J.....	627 Arch.
Kahn, William H.....	160 Dock.
Kile, J. & Co.....	50 N. Twelfth.
Kinney, Robert D.....	2217 Chestnut.
Luzier, Thos. B.....	Beach cor. Vienna.
Martin, John.....	1017 Ridge Ave.
Mis-elwitz, Oscar.....	241 Arch.
Montgomery, Archibald.....	821 Cherry.
Nevin, Harper P.....	231 Vine.
Page, John & Son.....	722 Chestnut.
Sansom, Charles.....	440 N. 12th.
Tull, Andrew J.....	931 Beach.
Whittaker, H. B.....	446 N. 12th.
Wright, Wm. A.....	160 Dock.

## PLUMBERS, STEAM AND GAS FITTERS.

Adams, John.....	2035 N. Front.
Alburger, W. C.....	440 Marshall.
Alcock, A. P.....	128 Arch.
Anderson, Robert.....	1126 Locust.
Anderson, William.....	1126 Locust.
Armstrong, John.....	5071 Germantown Av.
Armstrong, William.....	44 S. 18th.
Austin, Lemuel.....	615 N. Broad.
Avery, J. T.....	815 N. 6th.
Bacon, W. L.....	1329 Palmer.
Ball, David W.....	15 N. 40th.
Barelay, W. J.....	802 Norris.
Bardon, David J.....	403 Otis.
Barnes, Samuel W.....	2125 Germantown Av.
Barry, Patrick A.....	722 Oxford.
Barth, Thomas J.....	834 Callowhill.
Berk, William H.....	2301 N. 7th.
Beez, Jo in W.....	922 Randolph.
Bell, Charles T.....	4743 Frankford.
Bell, Hie, Thomas.....	1320 N. 16th.
Bender, B. E.....	872 N. 4th.
Bickel, Lewis M.....	1039 N. 4th.
Bing, Norris H.....	1216 Montgomery Av.
Bitting, Burgess A.....	409 N. 9th.
Blair, Samuel R.....	912 Ridge Av.
Blakely, William.....	1209 Master.
Blakemore & Sherman.....	4812 Germantown Av.
Bode, Adolph.....	1526 Germantown Av.
Bond, A. G.....	1344 Ridge Av.
Bonsall, W. S.....	3824 Market.
Borden, John & Son.....	637 N. 19th.
Borie, Joseph S.....	1009 Spruce.
Bossel, Joseph.....	1216 Randolph.
Bowker, Jno. F.....	4365 Main Manayunk.
Bowman, Chas. P.....	1639 N. 18th.
Bradley, James.....	718 Spring Garden.
Brannan, William.....	3807 Lancaster Av.
Brasington, Theo.....	1343 N. 8th.
Brautigam, W. H.....	1608 N. 11th.
Breyer, Geo.....	119 Girard Av.
Breyer, Geo. Jr.....	1252 Howard.
Brock, Thomas F.....	224 N. 4th.
Bross, John S., Jr.....	2324 Ridge Ave.
Brown, A. C.....	N. 8th cor. Buttonwood.
Brown, F. P.....	145 N. 6th.
Brown, Geo. B.....	120 S. 13th.
Brown, T. W.....	1324 Walnut.
Brown, W. E.....	422 Bainbridge.
Bryan, James G.....	1219 Spruce.
Bryan, John G.....	909 Race.
Bryan, Nathaniel.....	109 N. 7th.
Bryan, Richard G.....	128 Vine.
Buckby, John.....	2770 Kensington Ave.
Bunting, S. B.....	1352 South.
Burke, Henry J.....	1317 Ridge Ave.
Burleigh, William.....	16 S. 15th.
Burns, John J.....	415 Susquehanna Ave.
Burr, Joseph.....	603 S. 10th.
Buschner, Chas. R.....	135 S. 5th.
Cadwallader, Frank.....	1404 Oxford.

## PHILADELPHIA—Continued.

Callahan, Michael.....	1418 Stiles.
Cameron, A.....	1941 N. 15th.
Canby, George.....	201 S. 13th.
Canby, John.....	321 Arch.
Cantlin, Daniel.....	310 South.
Carr, Edwin J.....	30 S. 16th.
Carr, L. Frank.....	339 York Ave.
Carter, Geo. T.....	142 N. 5th.
Cassidy, William.....	8 S. 10th.
Chadwick, James.....	42-39 Frankford Ave.
Chambers, James H.....	1209 Ridge Ave.
Chapman, Ed. H.....	612 Marshall.
Cherry, Ambrose F.....	1514 Passyunk Ave.
Clark Bros.....	218 S. 12th.
Clark, James.....	146 N. 7th.
Clawson, Chas. H.....	1136 E. Huntingdon.
Clay, John H.....	1320 Ridge Ave.
Cobb, Daniel B.....	237 S. 5th.
Coffin, Harry.....	524 Walnut.
Collins, P. H.....	255 S. 5th.
Collison, W. H.....	4955 Germantown Ave.
Connelly, Thomas.....	29 N. 13th.
Convery, James.....	913 Christian.
Costello, Joseph.....	1204 S. 17th.
Craven, W. J.....	4458 Main, Manayunk.
Crookes, Geo.....	4416 Frankford.
Crookes, Geo. F.....	216 Sellers, Frankford.
Crowther, Samuel.....	819 Filbert.
Dalton, Christopher.....	1024 Columbia Ave.
Dalton, John H.....	713 Cambridge.
Daly, John A.....	5026 Lancaster Ave.
Deacon, Wm.....	1940 Germantown Ave.
Deacon, William.....	2-24 N. Front.
Deal, Chas.....	5202 Tucony, Frankford.
Deitz, W. H.....	217 S. 8th.
Delany, James J.....	48 N. 12th.
Danby, Charles.....	102 Arch.
Dietach, August C.....	314 N. 10th.
Dingee, William.....	610 Poplar.
Dixey, W. B.....	3826 Market.
Dobson, John & Son.....	4206 Main, Manayunk.
Donegan & Myers.....	2719 N. Broad.
Dorian & Anderson.....	1229 Girard Av.
Downing, J. & Co.....	718 Sansom.
Downing, William B.....	4251 Lancaster Av.
Doyle, W. H.....	233 S. 6th.
Drey, H. C.....	1805 N. 2nd.
Drummond, Geo., Jr.....	1847 Germantown Av.
Drummond, Robert.....	1528 Germantown Av.
Dukes, R. M.....	828 S. 2nd.
Duncan, Geo. W.....	1931 Frankford Av.
Duncan, James.....	2124 Trenton Av.
Durang, Robert.....	Mervine, cor. Master.
Eastwick, W. W.....	28 Strawberry.
Eiselman, Chas.....	2905 Ridge Av.
Eisenbraun, Wm.....	3511 Market.
Engels, Chas. H.....	455 Richmond.
English & Bro.....	1301 Poplar.
English, Thomas.....	1817 Fairmount Av.
Erdman, F. B.....	814 Perkiomen.
Esher, Chas. F.....	Tioga, cor. N. 10th.
Evanson, John E.....	241 S. 15th.
Faith, S. & Co.....	2334 Green.
Farrell, E. J.....	Montgomery Av., cor. N. 13th.
Faunce, W. H.....	45 N. 9th.
Fay, Mason K.....	702 Spring Garden.
Fenlin, Thomas F.....	312 Noble.
Ferguson, W.....	2 W. Orthodox, Frankford.
Fidelity Improvement Co.....	225 S. 5th.
Fisher, Bros.....	535 Cherry.
Flannagan, Thos. S.....	625 S. 10th.
Fleming, Thomas.....	1725 Darien.
Florence, Andrew.....	123 S. 5th.
Fogg, Albert.....	126 N. 12th.
Folley, Chas. B.....	1101 Montgomery Av.
Foreman, M.....	658 N. 12th.
Foster, Edward.....	3415 Ridge Av.
Foster, Harry A.....	1809 Market.
Fox, Geo., Jr.....	2042 Ridge Av.
Fricka, Charles D.....	1328 N. 17th.
Gabell, Geo. T., Jr.....	1324 Walnut.
Gardiner, John H.....	1512 Federal.
Geisenberger, Joseph.....	303 N. 13th.
Gill, B.....	526 N. 3rd.
Goodin, Samuel.....	30 N. 7th.
Gormley, Patrick.....	132 N. 10th.
Graham, Robert.....	N. 20th, cor. Brown

## PHILADELPHIA—Continued.

Greenfield, Levi S.	2303 Cedar.
Greenfield, W. H.	818 Aramingo.
Grier, Geo. W.	1624 Columbia Av.
Griffith, Nathan B.	2334 Jefferson.
Griffith, Paul.	411 Poplar.
Grosart, Alexander.	1012 Lingo.
Guenther, Chas. S.	348 Girard Av.
Haas, John L.	912 Girard Av.
Haggmiller, L. & Bro.	827 N. 4th.
Hak, August.	1509 Camac.
Haley, James M.	1749 N. 10th.
Hamilton, James E.	10 S. 17th.
Hamm, Charles A.	1004 Sergeant.
Hansbury, Henry S.	4408 Lancaster Av.
Harkness & Bro.	247 S. 3rd.
Hart, J. John.	2488 Coral.
Harper, Robert.	27 N. 16th.
Harshaw, James.	2118 Fitzwater.
Hayes, Howard P.	43 Bell.
Hazlet, Wm.	1115 Germantown Av.
Head, James.	149 Church, Frankford.
Hein, Geo. W.	1935 Callowhill.
Henry, Peter.	1604 N. 2nd.
Hesse, Stephen.	1508 Thompson.
Hesse, George.	325 Girard Av.
Hess, Philip, C.	1618 Walter.
Hewes, W. T.	1041 Spring Garden.
Hicks & Bro.	651 N. 8th.
Hirst, Isaac T.	340 N. 4th.
Hirst, John.	731 S. 16th.
Hirst, John Jr.	Tulip cor. Knorr.
Hoff-tedter, J.	633 Grand Av.
Holohan, Michael E.	2237 Columbia Av.
Holzer, Chas. F.	1830 Ridge Av.
Houghton, W. B.	650 E. York.
Howell, Lewis O.	2013 Columbia Av.
Hulme, Geo. W.	12 N. 7th.
Hutchinson, Samuel G.	249 S. 15th.
Hyar, James D.	2521 Germantown Av.
Hyde, Joseph.	103 Division.
Immeadiorf, Geo. H.	2004 Ell-worth.
Isminkir, Chas. F.	726 Federal.
Jackel, Henry.	577 E. York.
Jacobs, R. H.	1736 N. 19th.
Jahn, Charles.	4608 Germantown Av.
Jorger, Xavier.	510 N. 3rd.
Johnson, Alfred.	2037 Mervine.
Johnson, Isaac.	708 E. Dauphin.
Johnson, John W.	2210 Chestnut.
Johnson, Richard H.	1905 Haverford.
Johnson & Louchery.	1128 Market.
John-ton, Charles P.	520 N. 6th.
Jones, Alonso L.	114 N. 6th.
Jones, Joseph E.	Hartwell Av. nr. Germantown Av., Chestnut Hill.
Jones, Walter.	624 Master.
Kalbach, Henry L.	1383 Ridge Av.
Kane, William.	2516 Kensington Av.
Key, John, Jr.	716 S. 21st.
Ke-fo, Cornelius.	3501 Walnut.
Kelley, George.	2225 Pine.
Kennedy, George J.	503 N. 8th.
Kennedy, Samuel W. & Son.	516 Fairmount Av.
Kennedy, W. A.	219 Arch.
Kensel, W. L.	460 N. 6th.
Kern, B. F. Jr.	3835 Lancaster Av.
Kirk, W. S., Jr.	1619 Catherine.
Kite, Alexander.	3923 Lancaster Av.
Kite, J. Sellers.	337 N. 40th.
Klauder, John T.	3219 Woodland Av.
Klauder, Louis.	3302 Mar. et.
Kline & Bro.	432 N. 12th.
Kline & Mallo.	438 Master.
Knapp, John R., Jr.	1600 N. 16th.
Korb, John H.	1408 S. 8th.
Korb, John M.	1003 Beach.
Krouse, Godfrey.	21 Hudson.
Krouse, William.	129 Green.
Lancaster, F. Rhoades	W. Unity, cor. Franklin, Frankford.
Larkins, James.	1346 N. 10th.
Lawton James H.	345 S. 5th.
Leacock, A.	420 Cherry.
Leamer, H. J.	808 S. 5th.
Leinaw, M.	111 S. 7th.
Leitch, William.	4050 Lancaster Av.
Lindsay, W. E.	618 Preston.

## PHILADELPHIA—Continued.

Long, Christopher H.	1109 Locust.
Lott, William.	1905 Frankford Av.
Loughery, J. A., Jr.	4033 Lancaster Av.
Lovellidge & Bailey.	10 Rittenhouse, Germantown.
Lynch, Frank.	1208 Federal.
Lyons, James H.	17 N. 9th.
McAdoo & Winning.	58 S. 17th.
McAvoy, John C.	714 Poplar.
McCall, Samuel B.	1237 S. 2nd.
McCalmont, Thomas J.	2404 Frankford Av.
McCandless, W. J.	716 Walnut.
McCann, John.	1409 N. 2nd.
McCann, W. H.	204 Dock.
McCarthy, Henry.	244 S. 40th.
McCauley, Robert S.	806 Pass-yunk Av.
McCleary, John S. & Son.	872 N. 10th.
McCleron, John J.	725 Tasker.
McClung, Robt. A.	1920 Elsworth.
McCoach, Wm.	2015 Sansom.
McCollough, Wm.	2015 S. Sansom.
McConn, John.	727 Sansom.
McCormick, Wm.	1717 South.
McCoy, Chas. E.	1 N. 19th.
McElwee, James.	566 S. Broad.
McElwee, John.	2061 South.
McFall, John T.	2014 Pine.
McFarland, John B.	S. 6th cor. Pine.
McFetrich, John H.	900 Walnut.
McFetrich, Wm. R.	1820 S. 3rd.
McGill, Robert M.	288 N. 10th.
McGinley, John S.	343 S. 5th.
McGlone, Harry.	1610 Thompson.
McGlue, E. S., Jr.	N. 16th near Venango.
McGonigle, John.	759 S. 8th.
McGrath, John D.	1445 Ontario.
McGuckin, Jos. A.	1209 Dickinson.
McGuckin, J. & Bro.	1023 Christian.
McIntyre, Alexander.	1519 Frankford Av.
McMahon, H. J. & Son.	210 N. Broad.
McManamin, John C.	132 S. 7th.
McManemin & Gunzer.	Chestnut Ave. near Chestnut Hill depot.
McTague, John J.	717 S. 11th.
MacFerran, W. K.	1229 N. 2d.
Macknet, Albert W.	803 Green.
Mager & Nolan.	232 E. Girard Av.
Maguire, Francis P.	4337 Germantown Av.
Major, Robert.	1517 Pine.
Mansfield & Linn.	140 Chelton Ave. German- town.
Marshall, Thomas.	112 Exchange Place.
Martin, Samuel C.	5806 Haverford.
Mason, James T.	342 Chestnut.
Masinger, W. F.	874 N. 19th.
Mattis, Howard D.	Ridge Ave. near Lyceum Ave., Roxbury.
Mauil, John W.	274 S. 20th.
Mallen, James.	2802 Market.
Mentzinger, W. W.	822 Walnut.
Middleton, Nathan.	841 N. 7th.
Middleton, Chas. H.	167 Laurel.
Moloney, D. & Bro.	2023 Christian.
Monheimer, Henry.	144 S. 4th.
Mooney, Geo. W., Jr.	1203 Oxford.
Moore, Levi W.	506 Girard Av.
Morrison, C. R. & Bro.	2008 Fairmount Av.
Mort, n. Geo. M.	122 Catherine.
Muhlig, A.	326 S. 4th.
Mullin, Daniel D.	526 S. 5th.
Mullin, Henry F.	912 Pass-yunk Av.
Mindy, James A.	258 S. 9th.
Murfit, Geo. W.	1083 Germantown Av.
Murphy, M. J.	1932 S. 7th.
Murray, John M.	843 N. 3d.
Nicol, Walter.	518 N. 10th.
Norris & Brother.	1233 Race.
Norris, Henry.	2530 Fox.
Oglesby, W. P.	1017 Walnut.
O'Neil, Hugh.	803 S. Thirtieth.
O'Neil, Emmett.	4117 Frankford.
O'Neill, Frederic.	2116 Race.
Owens, W. L.	2312 Walnut.
Parker, T. W.	4107 Chestnut.
Parmalee & Long.	510 Richmond.
Paulin, Enos F.	1612 N. Twentieth.
Peale, A. R.	30 N. Thirtieth.
Peale, F. F.	1797 Chestnut.

## PHILADELPHIA—Continued.

Peck, W. S.	2207 Fairmount Ave.
Pfefferling, J. G.	2117 N. Fifth.
Phipps, G. O.	2120 Ridge Ave.
Presser, Henry	330 Noble.
Pryor, Jacob S.	1 Chelton Ave., Germantown.
Pugh, M. M.	22 S. Fortieth.
Radford, W. H.	263 S. Fifteenth.
Ragan, Thomas	3431 Market.
Raake, Henry	1401 S. Tenth.
Rappold, Christian	2315 Fairmount Ave.
Redefer, John K.	5037 Germantown Ave.
Reed, W. P.	4606 Lancaster Ave.
Rees, T. W.	N. 18th cor. Girard Ave.
Rein-tine Bros.	420 Fairmount Ave.
Remick, Enoch	924 N. Second.
Rie, F. E.	118 S. Sixth.
Rich, Frank	304 Poplar.
Richards, Joseph W.	1513 S. Fourth.
Ries, Jacob	Henrietta cor. N. Twenty-first.
Riley, Joseph P.	736 Passunk Ave.
Rit-tine, Clarence	810 S. Second.
Rob-er, S. John T.	1237 Pine.
Robertson, Geo. W.	156 N. Fifth.
Rob-ison, W. H.	122 N. Sixteenth.
Ross, James G.	S. Broad cor. Fitzwater.
Rose, W. R.	S. Broad cor. Fitzwater.
Roth, Christian G.	517 Callowhill.
Rn-ty, W. P.	936 N. Eleventh.
Russell Wm.	123 Race.
Rutherford & Honney	1703 Pine.
Rn-sehman, Edward	1841 Germantown Ave.
Saffin, Geo. W.	205 Arch.
Sandgran, Chas. M. & Bro.	1037 Parker.
Scattergood, Harry C.	1016 Pine.
Schaefer, W. E.	Reed cor. S. Sixth.
Schluter & Bro.	647 Franklin.
Schluter, Cha. O., & Sons	1757 Germantown Ave.
Scholl, Joseph	2712 Girard Ave.
Sharp, Joseph F.	2526 N. Tenth.
Shaw, Chas. S.	1029 Montgomery Ave.
Shlego, Geo. Jr.	1428 Frankford Ave.
Sherm-r, John A.	542 S. Eighth.
Sin-ster, L. J.	712 Callowhill.
Sink, Joseph J.	4017 Sycamore.
Smeeton, James	1921 N. 5th.
Smeeton, Samuel	207 Richmond.
Smith & Dale	4532 Germantown Ave.
Smith, H. A. W.	4853 Germantown Ave.
Smith, Samuel R.	1318 Poplar.
Smith, & Bro.	2215 Trenton Ave.
Snyder, Francis E.	1416 Franklin.
Snyder & Scholl	705 Oxford.
Steele, James	1535 Lombard.
Steger, Charles	1808 S. 5th.
Steinhart, Jacob	1428 N. 11th.
Stevenson, Thomas	1801 Christian.
Stewart, John H.	1352 South.
Storkton, Charles R.	823 N. 11th.
Stout, Geo. W.	550 N. 10th.
Stratton, M.	325 S. Juniper.
Sullivan, John M.	407 Locust.
Suppl-e, Geo. W.	4001 Lancaster Ave.
Swartz, Joseph, Jr.	411 E. Girard Ave.
Sweeney, J. J.	1809 Fitzwater.
Sweeney & Bro.	503 S. Third.
Tait, Wm.	2031 Christian.
Taten & Skotchley	32 S. Fourth.
Thackeray, Geo. T.	4938 Germantown Ave.
Thompson, Andrew	312 N. 21st.
Thompson, James D.	33 N. 9th.
Thompson, Matthew	110 S. 10th.
Timney & Fitzpatrick	132 Richmond.
Tittermary, Jesse W.	704 Washington Ave.
Toland, W. P.	484 N. 4th.
Tolley, C. B.	1101 Moyamensing Ave.
Toohill, Patrick	1127 S. 18th.
Toy & Bro.	929 Filbert.
Truitt, Thomas H.	1732 Ridge Ave.
Uber, George	N. 12th cor. Fairmount Ave.
Uber, Geo. F.	715 N. 15th.
Wall, John & Bro.	232 S. 40th.
Wallace, Geo. N.	328 N. 23d.
Walsh, James, Jr.	1012 South.
Walsh, Martin	1041 E. York.
Wanner, Louis	1716 Passunk Ave.
Wanner, Louis Jr.	1539 S. 4th.
Warner, Charles	4061 Germantown Ave.

## PHILADELPHIA—Continued.

Watmough, R. B.	4714 Penna. Frankford.
Watson, R. H.	1707 Chestnut.
Watt, Robert	1701 N. 20th.
Weaver, Thomas	1515 N. 21st.
Weaver & Pennock	33 N. 7th.
Webster, James	3600 Lancaster Ave.
Whealin, M. H. & Son	1345 Poplar.
Wheeler, W. G.	11 S. 18th.
White, W.	1813 Seybert.
White, W. J.	403 Walnut.
Wilkinson, Thos. R.	Ridge Av., cor. Dupont, Roxbury.
Williams, Joseph M.	145 S. 4th.
Wilson, James	2058 Camac.
Wilson, I. T.	1515 S. 7th.
Wilson, J. B. & H. H.	4207 Frankford.
Wood, Jas. P. & Co.	41 S. 4th.
Woodward, Samuel P.	1610 Fed-ral.
Worthington & Murrow	1721 Chestnut.
Worthington, Henry	4044 Market.
Wright, Robert E.	729 N. 46th.
Wright, W. M.	1101 Walnut.
Year-ley & Sutter	717 Spring Garden.
Yost, John F.	1414 Richmond.
Young & Bro.	1742 Ell-worth.
Young, Samuel	1133 S. 18th.

## RAILROAD SUPPLIES.

American Car Box Co.	230 S. 3rd.
Blakeley, John & Son	215 Church.
Blakey & Wallbaum	206 S. 4th.
Dwight, E. P.	40 Library.
German & Robinson	12 N. 4th.
Justice, Philip W., & Co.	14 N. 5th.
Mackie, C. P. & Co.	265 S. 4th.
Ramsay, R. H.	110 S. 4th.
Tolman & Stogle	501 Commerce.
Townsend, Isaac	203 N. 3rd.
Troxell, A. D. & Co.	207 S. Front.
Warton R. R. Switch Co.	Washington Av., nr. S. 23rd.
Wilhelm & Neuman	919 Race.
Williams, S. R.	130 N. 4th.
Williamson & Cassedy	24 S. 4th.

## SPRING MFBS.

Berry & Thurston	20 N. Seventh.
Burkhart, Oscar	979 Franklin.
Edwards, S. & Son	28 S. 7th.
Empire Car Spring Co.	813 Jayne.
Evans, John	N. 13th nr. Buttonwood.
Flinn, John	267 Levant.
Fowler & Franklin	405 N. Eighth.
Insull, Thomas	1439 Hutchinson.
Jeffries, J., & Sons	813 Jayne.
Middleton, N., & A. & Co.	928 Callowhill.
Mills, M. E. & Co.	936 Race.
Mooney, W. A.	342 N. Eighth.
Pickering, Chas. W. & Co.	N. 18th cor. Penna. Ave.
Rowland, Wm., & Harvey	Frankford.
Scott, Charles	1016 New Market.

## STEEL MFBS.

American Combined Iron & Steel Co.	275 S. Fourth.
Bennett, W. H.	417 Commerce.
Bessemer Steel Co.	218 S. Fourth.
Brinton, Robert M.	406 Commerce.
Combina-tion Steel & Iron Co.	206 Walnut Pl.
Crosby, Charles	1411 Barclay.
Crown Steel Works	413 Commerce.
Ely & Williams	1232 Market.
Eureka Cast Steel Co.	307 Walnut.
Foster, Alexander & Co.	2325 Spring Garden.
Gantier Steel Co.	5 S. Arch.
Hand, James C., & Co.	614 Market.
Hicks & Dickey	413 Commerce.
Hogan & Son	417 Commerce.
James River Steel Mfg. Co.	417 Walnut.
Kent, D. H., & Co.	1009 Arch.
Logan Iron & Steel Co.	218 S. Fourth.
Milvale Steel Co.	12 N. Fifth.
Morris, Wheeler & Co.	1608 Market & 400 Chestnut.
Naylor & Co.	208 S. Fourth.
Pennsylvania Steel Co.	208 S. Fourth.
Philadelphia Steel Forge	315 Willings Alley.
Philadelphia Iron & Steel Co.	939 N. Delaware Ave.
Rowland, Wm., & Harvey	Frankford.

## PHILADELPHIA—Continued.

Standard Steel Works ..... 220 S. Fourth.  
Tindel, Adam, ..... Margaretta cor. Bermuda, Fkd.  
Watson, James S., & Son, ..... 512 Commerce.  
Wharton, Wm. Jr., & Co., ..... S. 25th cor. Washing-  
ton Ave.

## TOOL MANUFACTURERS.

Bagshaw & Fiel ..... 220 N. 2nd.  
Barnett, Thos. R. .... 1700 N. 4th.  
Beatty, John & Co., ..... 503 Commerce.  
Bonney Vile & Tool Co., ..... 3015 Chestnut.  
Booth, John & Son, ..... 831 Ellsworth.  
Borger, Joseph, ..... 2633 N. 2nd.  
Cotton, Alfred J., ..... 355 N. 4th.  
Dautreschy, T., ..... 404 Thompson.  
Deal, Benj. C., ..... 105 N. 5th.  
Dewitt, Morrison & Kelley, ..... 9 N. 22nd.  
Disston, Henry & Sons, ..... Front and Laurel.  
Ellis, Geo. D. & Sons, ..... 307 Race.  
Favinger, Samuel, ..... 502 Master.  
Fianagin, W. J. & Co., ..... 32 N. 5th.  
Hammond, C. & Son, ..... 13 N. 5th.  
Horn, W. H. & Bro., ..... 451 N. 3rd.  
Huber & Co., ..... 105 N. 5th.  
Hunt, M. W., ..... N. 25th, cor. Berks.  
Milton, J. Garwood, ..... 3101 Ludlow.  
Nickel, John, ..... 628 N. 6th.  
Nittinger, Henry E., ..... 2413 N. 6th.  
Philadelphia Patent Tool Co., ..... 821 Cherry.  
Philadelphia Tool Co., ..... 1716 Barker.  
Rose, Wm. & Bros., ..... 3535 Filbert.  
Rue, Edward N., ..... 210 N. Broad.  
Schmidt, David, ..... 347 N. 4th.  
Shimwell, Benj. & Son, ..... 217 S. 24th.  
Steinmetz & Nonnenberger, ..... 1540 N. 5th.  
Sullivan, J. & J., ..... 220 N. 2nd.  
Veit, John, ..... 135 Green.  
Veit, John, ..... 601 New Market.  
Wilson, Joseph B., ..... 2004 Diamond.  
Yerkes & Plumb, ..... Treuton Av., cor. Church,  
Frankford.

## MISCELLANEOUS.

Allison, W. C., Car Builder, ..... S. 32nd, cor. Walnut.  
American Chain Co., ..... Mfrs. Chains, ..... 319  
Walnut.  
American Tube Works, ..... Mfrs. Brass Tubes, cor.  
4th and Locust.  
Bartle, Joseph D., Coppersmith, ..... 1933 Camac.  
Billbeck, J. & Co., Mfrs. Screws, ..... N. 17th, cor.  
Venango.  
Blessing, Chas. A., Mfr. Plumbers' Supplies, ..... 44  
N. 5th.  
Bowman, H. L., Engine Builder, ..... 43 S. 4th.  
Bowman, Bros., Mfrs. Heaters and Ranges, ..... 13  
N. 11th.  
Bradlee & Co., Mfrs. Chains, ..... 816 Richmond.  
Brill, J. G. & Co., Car Builders, ..... S. 31st, nr.  
Chestnut.  
Brodie & Comfort, Plumbers' Materials, 19 N. 7th.  
Bron, Samuel A., Millwright, ..... Pine Road, Fox  
Chase.  
Buck, W. J. Son & Co., Mfrs. Gas Fixtures, ..... 319  
Garden.  
Calverly, John, Mfr. Britannia Metal, ..... 455 N. 2d.  
Campbell, James A., Metal Spinner, ..... 1407 Vine.  
Cartledge, Joseph, Millwright, ..... Main near Race  
Hbg.  
Cata-aqua Mfg. Co., Rolling Mill, ..... 333 Walnut.  
Chase & Pear-all, Galvanizers, ..... 2423 S. 10th.  
Chester Steel Castings Co., ..... 407 Library.  
Clem & Morse, Mfr. Elevators, ..... 413 Cherry.  
Conn, J., Galvanized Iron, ..... 124 Canal.  
Cornelius & Co., Mfrs. Gas Fixtures, 132 Chestnut.  
Cramp, Wm. & Sons, Iron Ship & Engine Build-  
ers, Beach near Norris.  
Creage, Stephen, Mfr. Nails, 621 Vincent.  
Davenport, G. M., Mfr. Saw, ..... 1948 Trenton Ave.  
Dell, Jno. C., Mfr. Scales, ..... 416 Vine.  
DeSaque, Pierre C., Mfr. Lead Pipe, ..... 603 Sansom.  
Dettmer, Chas., Coppersmith, ..... 207 Wood  
Dick, Lewis, Metal Spinner, ..... 239 Allen.  
Disston, Henry & Sons, Mfrs. Saws, ..... Front &  
Laurel.  
Electro Dynamic Co., Mfrs. Electrical Motors,  
121 S. 3d.  
Farrell & Co., Mfrs. Safes, ..... 331 Chestnut.

## PHILADELPHIA—Continued.

Forrest, Benj. Jr. & Co., Mfrs. Chains, Clifton cor.  
Westmoreland.  
Gibson, Shaw & Co., Mfrs. Gas Fixtures, 710 Chest-  
nut.  
Graham, Emlen & Passmore, Mfrs. Agl. Impts.,  
631 Market.  
Green, Henry C., Plumbers' Supplies, 631 Market.  
Hammitt, T. M., Coppersmith, ..... 322 Vine.  
Harbert, Samuel C., Engine Builder, 1907 Market.  
Harper, Smith, Mfr. Hoes & Rakes, ..... 13 N. 5th.  
Haydon, A. & M., Mfrs. Bolts, ..... 312 N. 22d.  
Heald & Jones, Mfrs. Axles, 15th & Fairmount Av.  
Henis, Wm. G., Metal Spinner, ..... 1347 Ridge Av.  
Hoopes & Townsend, Mfrs. Bolts, Rivets, etc., 1330  
Buttonwood.  
Horn, Pfeiffer & Co., Mfrs. Gas Fixtures, 479 N. 5th.  
Hussey, Peter J., Plumbers' Supplies, ..... 144 N. 3d.  
Kelly's Eagle Gas Fixture Mfy, ..... 922 Cherry.  
Keystone Horse Shoe Co., ..... 17th & Clearfield.  
Kimball, H. A., Mfr. Band Saws, ..... 614 Filbert.  
Klaltz, Chas., Metal Spinner, ..... 821 Cherry.  
Ledig, A. & Son, Metal Spinners, ..... 248 N. 8th.  
Lippincott, Chas. & Co., Coppersmiths, 925 Filbert.  
McCalvey, Mrs. Emma E., Mfr. Hoisting Ma-  
chines, 602 Cherry.  
McMullin, Robt. G., Shipsmith, ..... 1450 Beach.  
McNiece, Wm., Mfr. Saws, ..... 515 Cherry.  
Marvin Safe Co., Mfrs. Safes, ..... 623 Chestnut.  
Marshall Bros. & Co., Rolling Mill, ..... 1215 Beach.  
Mas, P. P. & Co., Mfrs. Agl. Impts., 216 N. Broad.  
Messinger, Chas. J., Metal Spinner, 120 Exchange  
Place.  
Miles, F. S., Mfr. Screws, ..... 205 Quarry.  
Miller, D. K., Lock Co., ..... 821 Cherry.  
Morris, I. P. Co., The, Mfrs. Steam Engines, 1057  
Richmond.  
Myers & Smith, Mfrs. Safes, ..... 3029 Chestnut.  
Nicholls, Harry, Mfr. Saws, ..... 119 Gothic.  
Norris, Geo. L., Mfr. Saws, ..... 2005 Ritter.  
O'Neil, Arthur, Coppersmith, ..... 243 S. Front.  
Olsen, T. & Co., Mfrs. Scales, N. 12th cor. Button-  
wood.  
Osborne, D. M. & Co., Mfrs. Reapers & Mowers,  
242 N. Broad.  
Perks, Charles, Plumbers' Materials, ..... 627 Arch.  
Philadelphia Galvanizing Co., ..... 2130 Race.  
Philadelphia Lock Co., ..... 12th & Hamilton.  
Philad-lphia Screw Co., Mfrs. Iron & Brass Screws,  
N. 12th cor. Buttonwood.  
Pratt & Fullaway, Plumbers' Materials, ..... 628 Race.  
Price, Lip-wett & Airey, Mfrs. Scales, ..... 1114 S. 13th.  
Pugh, Job T., Mfr. Augers, ..... 3111 Ludlow.  
Putman Palace Car Co., Car Builders, N. 41st,  
cor. P. R. R.  
Ramschasel, J., Mfr. Spikes & Nails, 917 Hanover.  
Richards, P., Mfr. Tacks & Nails, ..... Ft. Downton,  
Nictown.  
Riehle Bros., Mfrs. Scales, ..... N. 9th, near Master.  
Roberts, A. & P., & Co., Mfrs. Car Axles, 265 S. 4th.  
Sansom Mfg. Co., Mfrs. Cutlery, Oxford cor. Hedge  
Frankford.  
Scarkle & Bros., Metal Spinners, ..... 821 Cherry.  
Schofield, Philip G., Mfr. Steam Gauges, ..... 571  
Dickinson.  
Schrader, H., Mfr. Gas Fixtures, 2833 Girard Ave.  
Shaw, Thomas, Mfr. Steam Gauges, 915 Ridge Av.  
Shields, Wm., Mfg. Co., Twenty-third ur. Race.  
Shields, S. J., Mfrs. Bolts & Nuts, 2224 Penna. Ave.  
Sherrill, Henry W., Engine Builders, ..... 213 S. 5th.  
Simpson & Jackson, Mfrs. Bolts, N. 22d cor. Filbert.  
Sinker, Henry, Fancy Metal Works, 609 Callowhill.  
Skelly, Thomas, Mfr. Bolts, 322 N. Twenty-fourth.  
Sparks, Thos. W., Mfr. Bar Lead & Shot, ..... 131 Car-  
penter.  
Stambach & Love, Plumbers' Supplies, ..... 56 N. 7th.  
Stewart & C., Mfrs. Chains, ..... 125 N. Third.  
Stillwell, A. H., Shipsmith, ..... 764 Swanson.  
Stolpp Bros., Mfrs. Shears, &c., ..... 241 Arch.  
Stortz, John, Mfr. Cutlery, ..... 210 Vine.  
Straus, Jos. E., & Co., Galvanized Iron, ..... 45 Rich-  
mond.  
Sykes, L. & Son, Mfrs. Bolts, ..... 723 Richmond.  
Tatham & Bros., Mfrs. Lead Pipe, ..... 224 S. Fifth.  
Thackara Sons & Co., Mfrs. Gas Fixtures, N. 12th  
cor. Brown.  
Townsend, Wilson & Hubbard, Mfrs. Bolts, ..... 3301  
Cherry.

**PHILADELPHIA—Continued.**

Troemner, Henry, Mfr. Scales.....1404 N. 22d.  
 Trotman, H., Coppersmith.....831 N. Fourth.  
 Turner & Harrison Mfrs. Steel Pens.....N. 12th,  
 cor. Buttonwood.  
 Tway, A. & J. H., Shipsmiths, 1028 N. Delaware Av.  
 Walzer, W. H., Mfr. Chains.....3132 Frankford Av.  
 Watson & McDaniels.....Plumbers' Supplies.  
 248 N. Eighth.  
 Welsh, Jos. R., Mfr. Chains, E. Norris, cor. Beach.  
 Welsh & Lea, Mfrs. Bolts & Nuts.....145 Columbia Av.  
 White, Joseph, Metal Spinner.....127 N. Seventh.  
 Whitecar, Joseph, Shipsmith.....402 Penn.  
 Whitney, A., & Sons, Mfrs. Car Wheels, Callowhill  
 nr. N. Sixteenth.  
 Winch, Corydon, Mfr. Spikes.....Canal nr. German-  
 town Av.  
 Wright, Richard, Millwright.....5148 Torr Av.

**PHILLIPSBURG.**

Gowland, M.....Iron Founder.

**PHOENIX.**

Miller, Jno.....Millwright.

**PHOENIXVILLE.**

Acker, Z.....Iron Founder & Machinist.  
 Davis, W. H. H.....Plumber.  
 Denithorne Bros.....Iron Founders & Machinists.  
 Moorehall Mfg. Co.....Iron Founders & Machinists.  
 Phoenix Iron Co.....Mfrs. Iron.

**PICKERING.**

Hartman, G. S.....Machinist.

**PICKWICK.**

Sheffer, Geo. M.....Machinist.  
 Townley, J. T.....Boiler Maker.

**PIERCE.**

Shoemaker, Jacob.....Boiler Maker

**PILLOW.**

Gottshall, Emanuel.....Machinist.  
 Hoffman & Emerick.....Mfrs. Agl. Impts.  
 Snyder, Benj.....Iron Founder.

**PINE IRON WORKS.**

Bailey, J. L.....Rolling Mill

**PINEY CREEK.**

Cooper, G. E.....Millwright.

**PITMAN.**

Haas, David.....Iron Founder.

**PITTSBURGH.****BOILER MAKERS.**

Bauman & Co.....Duquesne Way and Point.  
 Brenneman & Ward.....20 Penn Av.  
 Carroll, D. W. C. & Co.....Liberty and 3rd Av.  
 Cuddy, James.....43rd and A. V. R. R.  
 Douglass, W. & Sons.....23 Carson.  
 Lappen, J. & Co.....20th nr. Penn Av.  
 McNeil, J. & Bro.....20th and Railroad.  
 Manchester, W. & Son.....28th and Railroad.  
 Munroe, Robert.....23rd and Smallman.  
 Rees, Jas. & Son.....61 Penn Av.  
 Rees & Thorny.....First and Duquesne Way.  
 Riter & Conley.....55 Water.  
 Stetler, A. & Sons.....31st and Smallman.

**BRASS FOUNDERS.**

Atwood & McCaffrey.....50 3rd Av.  
 Bailey, Farrell & Co.....6th Smithfield.  
 Bostwick, W. S.....33rd and Railroad.  
 Cadman, A. W. & Co.....Duquesne Way nr. 6th.  
 Carbon Bronze Co.....38 Water.  
 Fitzsimmons, John.....23 Carson.  
 Falcons, A. Son & Co.....91 1st Av.  
 Green, G. W. & B. F. & Co.....41st and A. V. R. R.  
 McKenna, A. & T.....82 3rd Av.  
 Mansfield & Co.....49 Water.  
 Sheriff, J. B. Son & Co.....68 Water.  
 Thompson, Epping & Carpenter.....882 Penn Av.  
 Wilson, Snyder & Co.....52 Water

**PITTSBURGH—Continued.****IRON FOUNDERS.**

Adams, S. Jarvis & Co.....250 2nd Av.  
 Anshutz, H. & Co.....214 Liberty.  
 Atlas Works.....28th and Smallman.  
 Bissell & Co.....235 Liberty.  
 Bolz, Hugh M.....Duquesne Way and Point.  
 Brice & Eisen n.....147 Water.  
 Cavett & McKnight.....31 Penn Av.  
 DeHaven & Co.....22 Wood.  
 Duncan & Baldwin.....14th and Etna.  
 Fisher, Thomas & Co.....21st and Mary.  
 Friesel, J.....1st and Penn Av.  
 Garrison, A. & Co.....6 Wood.  
 Graff, Hugus & Co.....206 Liberty Av.  
 Hartupee, W. D.....33 Water.  
 Hillard & Sterritt.....Duquesne Way nr. 4th.  
 Hussey Mfg Co.....27th and Railroad.  
 Irwin, W. H.....188 Liberty.  
 Jacobus & Nimick Mfg Co.....67 1/2 Wood.  
 Kinzer & Jones.....37 Penn Av.  
 Lathwood, Jas.....90 Forbes.  
 Lea, Robert.....1st Av. and Ferry.  
 Lewis Foundry & Machine Co.....10th and  
 Neville.  
 McConway, Torley & Co.....861 Liberty Av.  
 Mackintosh, Hemphill & Co., Etna, 12th and 13th.  
 Marshall, James & Co.....23 19th.  
 Miller, Wm. S. n & Co.....Duquesne Way and 4th.  
 Morris & Marshall.....23rd and Liberty Av.  
 Pittsburg Mfg Co.....Railroad nr. 28th.  
 Pittsburg Smelting & Tuiere Co.....13th and Pike.  
 Price, W. G. & Co.....33 Wood.  
 Rees, James.....4th and Duquesne Way.  
 Robinson, Rea & Co.....134 Water.  
 Roney, John.....20th and A. V. R. R.  
 Totten & Co.....24th and Railroad.  
 Wilcox, Shinkle & Co.....39 Water.  
 Wilcox & Co.....Etna Station, W. P. R. P.  
 Young, Jas. B. & Co.....41st and 42nd.

**IRON AND STEEL MANUFACTURERS.**

Brown & Co.....10th and Duquesne Way.  
 Byers, A. M. & Co.....198 Water.  
 Carnegie Bros. & Co.....33rd and A. V. R. R.  
 Cassidy & Co.....145 4th Av.  
 Clark, Wm. & Co.....35th.  
 Elba Iron & Bolt Co.....Smithfield and Water.  
 Eversn, Macrum & Co.....2nd Av. nr. Upper Mon-  
 onongahela Bridge.  
 Friend, J. W. & Co.....W. Carson 36th wd.  
 Graff, Bennett & Co.....97 Water.  
 Hussey, Howe & Co.....17th and Penn Av.  
 Jones & Laughlin.....3rd Av. and Try St.  
 Keystone Rolling Mill Co.....2nd Av. 14th wd.  
 Kirkpatrick & Co.....143 1st Av.  
 Kloman, Andrew.....116 Market.  
 Laufman & Co.....83 4th Av.  
 Laughlin, F. B. & A.....11th and Etna.  
 Laughlin & Co.....3rd Av. and Try.  
 Lloyd, H. Son & Co.....2nd Av. above Try.  
 Long & Co.....188 Liberty.  
 McKee, Anderson & Co.....56 5th Av.  
 Manchester Iron & Steel Co.....61 4th Av.  
 Miller, Metcalf & Parkin.....49th and A. V. R. R.  
 Moorhead, McCleane & Co.....2nd Av. nr. B. R. Ry.  
 National Tube Works.....113 Water.  
 Oliver Bros. & Phillips.....91 Water.  
 Painter, J. & Sons.....97 Water.  
 Park Bros. & Co.....Railroad and Smallman.  
 Phillips, Nimick & Co.....W. Carson below Monon-  
 gahela Bridge.  
 Pittsburgh Bessemer Steel Co.....87 Wood.  
 Pittsburgh Forge & Iron Co.....Penn Av. and 10th.  
 Pittsburgh Steel Works.....Ross and First Av.  
 Shoenberger & Co.....15th and Etna.  
 Singer, Nimick & Co.....83 Water.  
 United States Iron & Tin Plate Co.....200 Liberty.  
 Wellsville Plate & Sheet Iron Co.....111 Water.  
 West Penn Steel Works.....106 4th Av.  
 Wilson, Walker & Co.....29th and Railroad.  
 Wood, W. D. & Co.....111 Water.  
 Zug & Co.....13th and Etna.

**MACHINERY AND MACHINISTS' SUPPLIES.**

Baird, U.....75 Water.  
 Baird & Gazzam.....Wood and 1st Av.

**PITTSBURGH—Continued.**

Duff Mfg. Co.,.....116 Market.  
Ecoff, John H.,.....3rd Av. and Market.  
Ewing, Mitchell & Co.,.....14 Wood.  
Fahy, John,.....38 13th.  
Harmes, A. G.,.....92 1st Av.  
Kay Bros. & Co.,.....121 Water.  
McNich, A. M.,.....116 Liberty.  
Sprague & Co.,.....6th and Penn Av.  
Turner, Chas. A.,.....92 1st Av.

**MACHINISTS.**

Ahlborn & Neckerman,.....33rd and A. V. R. R.  
Atlas Works,.....28th and Smallman.  
Axthelm, Ernst,.....103 3rd Av.  
Bair & Gazzam,.....17 Wood.  
Bole, H. M.,.....Duquesne Way and Point.  
Butler, D. C.,.....40 Liberty.  
Cavett & McKnight,.....34 Penn Av.  
Ehrensing, W. & Co.,.....170 Grant.  
Fisher, Wm.,.....23rd and Smallman.  
Garrison, A. & Co.,.....6 Wood.  
Hartupier, W. D.,.....33 Water.  
Hussey Mfg. Co.,.....27th and Railroad.  
Kirk, Geo. W.,.....1210 Bingham.  
Lea, Robert,.....1st Av. and Ferry.  
Lewis Foundry & Machine Co., .. S. 10th and Ne-  
ville.  
Marshall Bros.,.....69 Diamond.  
Milholland, J. & J. B.,.....5th Av. and Tunnel.  
Orr, R. L.,.....49 Water.  
Phillips Mfg. Co.,.....217 1st Av.  
Pittsburg Mfg. Co.,.....Railroad nr. 2th.  
Rees, James,.....4th and Duquesne Way.  
Reithmuller, J. C. & Son,.....Strawberry and Cherry  
Ave.  
Renton, Wm.,.....67 Water.  
Robinson, Rea & Co.,.....Carson nr. 1st.  
Rogers, Chas.,.....72 Water.  
Totten & Co.,.....24th nr. Railroad.  
Velte, W. & Co.,.....Penn Av. & 32nd.  
Westinghouse Machine Co.,.....25th & Liberty Av.  
Wilcox, Shinkle & C.,.....39 Water.

**PLUMBERS, STEAM AND GAS FITTERS.**

Addy, Jno. M.,.....Penn & Highland Aves.  
Addy Bros.,.....139 2nd Av.  
Atwood & McCaffrey,.....50 3rd Av.  
Bai ley, Farrell & Co.,.....167 Smithfield.  
Barnett, C. G.,.....103 Fuit n.  
Barnett, Robert,.....217 2nd Av.  
Beek-r, C. P.,.....3813 Butler.  
Beeker, I. K.,.....226 Penn Av.  
Bergman, D.,.....417 5th Av.  
Blythe, Frank P. & Co.,.....56 Wylie Av.  
Busmyer, W. H. & Co.,.....207 5th Av.  
Bourne, E.,.....31 Western Av.  
Bourne, John,.....31 Market.  
Cochran, John B. & Co.,.....80 3rd Av.  
Collins, Wm.,.....213 5th Av.  
Connor, John,.....270 5th Av.  
Donahoe, F. J. & Co.,.....470 5th Av.  
Durning & Sullivan,.....4317 Butler.  
Foran, Edw.,.....183 Webster Av.  
Gray, S. ook & Co.,.....Water & Short.  
Grundy, F. A.,.....128 3rd Av.  
Hageman, Aaron,.....Main.  
Halpin, Kennedy & Co.,.....27 Smithfield.  
Hare, S. W. & Co.,.....1717 Carson.  
Hillig & Gels,.....74 S. 12th.  
Herley, D.,.....5th Av. Oakland.  
Houston, H. & Co.,.....17 7th Av.  
Humbert, Chas. H.,.....69 Market.  
Kelly & Jones,.....141 1st Av.  
Keitenburg, G. W.,.....401 Penn Av.  
Keitenburg, C. A. E.,.....428 Penn Av.  
King, C. W.,.....Centre Av. nr. Penn Av.  
Klenin, Wm.,.....1246 Penn Av.  
Kohne, F. & Co.,.....141 4th Av.  
Leizko,.....73 S. 11th.  
McGinnis, J. & Bro.,.....116 Grant.  
McGraw, A.,.....84 7th Av.  
McKnight & Victory,.....72 Smithfield.  
McSteen, M.,.....1247 Penn Av.  
Miller, E. T.,.....161½ Wylie Av.  
Mill, Jas.,.....58 Penn Av.  
Moss, Joseph,.....1308 Penn Av.  
O'brian, Wm.,.....407 Bu ler.

**PITTSBURGH—Continued.**

Olnhausen & Succor,.....1218 Carson.  
Pittsburg Steam Heating Co.,.....136 1st Av.  
Ramsden, T.,.....607 Penn Av.  
Reinecke Bros.,.....61 Wood.  
Reinecke, Wilson & Co.,.....28 Smithfield.  
Rice, Jos.,.....65 3rd Av.  
Ricketts, James J.,.....446 5th Av.  
Ricketts, L. A.,.....383 5th Av.  
Robinson & Cowley,.....8 Franktown Av.  
Sands, George,.....88 Fulton.  
Sands, Jos.,.....720 Carson.  
Scott, Samuel,.....192½ Webster Av.  
Sherriff, J. B. Son & Co.,.....68 Water.  
Tate & Munden,.....313 Liberty Av.  
Wall, Chas. P. & Co.,.....483 5th Av.  
Weld-n & Kelly,.....147 Wood.  
Wilson, Snyder & Co.,.....52 Water.

**MISCELLANEOUS.**

Alter, H. A., Sheet Iron Worker,.....1011 Park Av.  
Bair, H. C., Mfr. Steam Pumps,.....17 Wood.  
Barnes Safe & Lock Co., Mfrs. Safes,.....129 3rd Av.  
Bown, James, Mfr. Rifle Barrels, &c.,.....136 Wood.  
Breed & Edwards, Mrs. Plows, Water below Penn  
Av.  
Burford, John, Coppersmith,.....60 Water.  
Caleh, Feider & Co., Iron &c.,.....28 Ross.  
Charles, Wm. & Co., Mfrs. Bolts & Nuts,.....16th  
below Pike.  
Chess, Cook & Co., Mfrs. Nails,.....116 Water.  
Cochrane, J. B. & Co., Mfr. Iron Railings, 86 3d Av.  
Collins, Park & Co.,.....Mfrs. Britannia Ware,  
1208 Bingham.  
Collins & Wright, Mfrs. Britannia Ware, 185 1st Av.  
Creacent Spring Co., Mfrs. Springs,.....81 Wood.  
Dilworth, Porter & Co.,.....Rail Road Supplies,  
Smithfield & Water.  
Eagle File Works, Mfrs. Files,.....46 7th Av.  
Eckesdorfen, Fredk., Mfr. Files,.....2022 Carson.  
Englert, Salier & McCoy,.....Engine Builders,  
16th & Pike.  
Ewing, Mitchell & Co., Railroad Supplies, 14 Wood.  
French, Aaron & Co.,.....Mfrs. R. R. Springs,  
21st & Liberty Av.  
French Spiral Spring Co.,.....26th & Liberty Av.  
Gibb, W., Pattern & Model Mkr., 20th nr. Penn Av.  
Gillespie, Bros. & Co., Mfrs. Bolts, 21st & Railroad.  
Glass, G. W.,.....Allegheny Railroad.  
Gekler B., Mfr. Edge Tools,.....417 Penn Av.  
Hatry, A. G.,.....Railroad Sup, plies,  
Bissell Block, 7th Av. & Smithfield.  
Hubbard, Bakewell & Co.,.....Mfrs. Saws, &c.,  
Dinwiddie & Colwell.  
Hussey, Bins & Co., Mfrs. Shovels,.....27th & R. R.  
Hussey, C. G. & Co., Mfrs. Brass,.....49 6th Av.  
Iron City Tool Works, Mfrs. Tools, Penn Av. & 32d.  
Jenkins & Barr,.....Pattern & Model Makers,  
Penn Av. & 26th.  
Jones, Robert M.,.....Pattern & Model Maker,  
876 Penn Av.  
Klein, Logan & Co., Mfrs. Tools,.....head S. 13th.  
Lanz, Matthew & Son, Mfrs. Bolts,.....28th & Carson.  
Leishman & Snyder,.....Railroad Supplies,  
Penn Av. & 6th.  
Long & Son, Pattern & Model Makers,.....49 Water.  
McCarthy, W. C., Mfr. Anvils,.....33rd & A. V. R. R.  
McKnight, H. Denny & Co.,.....Mfrs. Steam Pumps,  
77 1st Av.  
McMurtree, Geo. G., Mfr. Nuts, &c., 22d & Railroad.  
Macintosh, Hemphill & Co.,.....Engine Builders,  
Ema 12th & 13th.  
Mariat, Z. C., Pattern & Model Maker,.....17 Wood.  
Metall, Paul & Co., Mfrs. Tools, 7th Av. & Liberty.  
Miller, Anton, Mfr. Files,.....1919 Josephine.  
Park, Scott & Co., Copper Works,.....12 2nd Av.  
Pennsylvania Drop Forging Co.,.....27 Fayette.  
Pennsylvania Tube Co., Mfrs. Iron Pipe, 167 1st Av.  
Pittsburgh Locomotive & Car Works,.....10 6th.  
Pittsburgh Safe & Lock Co.,.....167 Penn Av.  
Pittsburgh Steel Casting Co.,.....26th & Railroad.  
Porter, H. K. & Co.,.....Mfrs. Locomotives,  
Smithfield & Water.  
Price & Connell,.....Pattern & Model Makers,  
32nd & Penn Av.  
Reeling, F. & Son,.....Mfrs. Iron Railings,  
5th & Butler.  
Reiter & Co., Mfrs. Chains,.....29th & Railroad.



**PITTSBURGH—Continued.**

Reiseck Bros. Mfrs. Safes.....16th nr. Penn Av.  
 Robson, Jno. & Son.....Mfrs. Chains,  
 2nd Av. nr. Lock No. 1.  
 Sealfie W. B. & Son.....Sheet Iron & Copper Works,  
 119 1st Av.  
 Severance, S. Mfr. Spikes & Rivets.....53 Water.  
 Sipe & Lippert, Mfrs. Saws.....170 Grant.  
 Speer, A. & Sons.....Mfrs. Plows,  
 Duquesne Way, 5th & Cecil Av.  
 Spratt, Johnston & Co., Mfrs. Plows.....145 Lib. rty.  
 Standard Nut Co.....4th & Bingham  
 Stender & Schliedesberg, Coppersmiths, 151 1st Av.  
 Townsend, W. P. & Co., Mfrs. Rivets, &c., 19 Market.  
 Ward Axle, Brake & Coupler Co.....87 Diamond.  
 Webb Tool Co., Mfrs. Drills, &c.....116 Smithfield.

**PITTSTON.**

Anderson, John.....Plumber.  
 Jones, Jno. T.....Plumber.  
 Lee Arms Co.....Mfrs. Pistols.  
 Merritt, Jno.....Gas Fitter.  
 Pittston Engine & Machine Co.  
 Pitston Stove Co.  
 Scrimgeour, Jno.....Plumber.  
 Taylor, Jno. W.....Plumber & Gas Fitter.  
 Union Stove Mfg. Co.  
 Wisner & Strong.....Iron Founders & Machinists.

**PLEASANT RUN.**

Hartzell, D. W.....Machinist.

**PLEASANT UNITY P. O.**

Smith, C. H.....Machinist.

**PLEASANTVILLE.**

Barnes, S. A.....Machinery, &c.  
 Locke, Jonathan & Sons.....Machinery, &c.

**PLUMVILLE.**

Bowser, W. E.....Iron Founder.

**PLYMOUTH.**

Howell's Mining Drill Co.  
 Lees Bros.....Plumbers.  
 Wren, John Y.....Machinist.

**PORT MARION.**

Dilliner, Ambrose.....Millwright.  
 Moore, Joseph.....Millwright.

**POINT ALLEGHENY.**

Hughes & Rew.....Iron Founders.

**PORT CARBON.**

Allison, Robt.....Iron Works.  
 Pottsville Iron & Steel Co.

**PORT CLINTON.**

Milldale Iron Co.....Mfrs. Iron.

**PORTLAND.**

Barton & Blake Mfg. Co.....Iron Founders and  
 Machinists.  
 Pearson, Lewy.....Iron Founder & Machinist.

**PORT ROYAL.**

Jacobs, Jno. F.....Iron Founder.

**POTTERS MILLS.**

Decker, Thos. J.....Millwright.

**POTTSTOWN.**

Bailey, Joseph L. & Co.....Rolling Mill.  
 Bailly & Baldwin.....Plumbers.  
 Brendlinger, P. & Co.....Iron Founders.  
 Byar Bros.....Machinists.  
 Crosby, R. J.....Plumber.  
 Davis, Hezekiah B.....Gas Fitter.  
 Ellis, Wm. S.....Iron Founder.  
 Ellis' Keystone Agri. Impl'ts. Co.  
 Ellis & Lessig.....Iron Founders & Machinists.  
 Fegeley, J., & Co.....Iron, &c.  
 Fritz, Egolf & Co.....Iron, &c.  
 Glasgow Iron Co.  
 Guest, Edmund.....Gas Fitter.  
 Keystone Tack Co.....Mfrs. Tacks.

**POTTSTOWN—Continued.**

Kulp, Henry G., & Co.....Iron, &c.  
 Pine Iron Works.....Rolling Mill.  
 Potts Bros. & Co.....Rolling Mill.  
 Pottstown Iron Co.  
 Royer, W. S., & Co.....Machinists.  
 Sotter Bros.....Boiler Makers.  
 Steel, J. D., & Sons Mfg. Co.....Machinists.  
 Warwick Iron Co.

**POTTSVILLE.**

Adams' Brass Works.  
 Andrews, Edward.....Gas Fitter.  
 Atkins Bros.....Rolling Mill.  
 Bannan, F. B.....Machinist.  
 Colliery Iron Works.  
 Davis, Wm. L.....Gas Fitter.  
 Derr, Simon.....Iron Founder.  
 Foster, Harry R.....Gas Fitter.  
 Haywood, Benj.....Rolling Mill.  
 Kalbach, Wm.....Plumber.  
 Lafferty, F.....Plumber.  
 Parker, Hiram Jr.....Boiler Maker.  
 Penna. Diamond Drill Co.  
 Pott, Jno. L.....Iron Works.  
 Philada. Coal & Iron Co.  
 Pottsville Iron & Steel Co.....Rolling Mill.  
 Roseberry, G. D.....Mfr. Bolts, Nuts & Spikes.  
 Russell, James S.....Gas Fitter & Plumber.  
 Schilling, J. F.....Mfr. Safes.  
 Seltzer, G. F.....Plumber.  
 Smith, Geo. W., & Co.....Machinists.  
 Sparks & Parker.....Boiler Makers.  
 Zweibel, Michael.....Brass Founder.

**PROGRESS.**

Shearer, Wm.....Machinist.  
 Sinnig, Charles.....Machinist.

**PROVIDENCE.**

Carter, Pulaski.....Mfr. Edge Tools.  
 Fish, Jno. B.....Plumber.  
 Friell, Hibberd & Robinson.....Mfrs. Stoves.  
 Roberts, M. O.....Machinist.

**PULASKI.**

Porter, N. M.....Iron Founder.

**PUNKSUTAWNEY.**

Benade, P.....Brass Founder & Machinist.  
 Clayville Mfg. Co.....Iron Founders.  
 Dismore & Hetrick.....Iron Founders.  
 Gueford, C.....Mfr. Files.  
 Jordan, J. G., & Co.....Mfrs. Agri. Impl'ts.  
 Richmond, W. H.....Mfr. Files.  
 Rogers, Roberts, Scyces & Co.....Mfrs. Stoves.

**QUINCY.**

Metcalf, J. R.....Machinist.

**RAILROAD.**

Grove, James A.....Millwright.

**RAY'S HILL.**

Bee, Jacob.....Millwright.

**READING.****MACHINISTS.**

Central Foundry & Machine Co. Hamar, James.  
 Cheetham, J. H. Heckendorn & Wilhelm.  
 Dennison Mfg. Co. Kinsey, T. P.  
 Douglass & Connard. Mellert Foundry & Machine Co.  
 Greth, A. C. (Ext. of). Miller, Printz & Co.  
 Grist, B. W., & Co. Robinson, W. H.  
 Grosh, Walter B. Schmehl, Elias C.

**PLUMBERS, STEAM AND GAS FITTERS.**

Drexel, John Jr. Rambo, Francis.  
 Heckman, H. H. Roland, L., & Co.  
 Heckman, Wm. A. Rowe, Henry T.  
 Lang, Thos. W. Scull, Edward.  
 Miller, Geo. M. Summons, E. S., & Co.  
 Miller, J. Weber, Thos. E.  
 Moyer, John H.

**READING—Continued.****MISCELLANEOUS.**

Addison, T. L. .... Mfr. Sheet Iron Buckets.  
 Boone, J. H. .... Iron, &c.  
 Cheetham, J. H. .... Iron Founder.  
 Chestnut Grove Iron Co.  
 Golcher Bros. & Co. .... Mfrs. Carriage Bolts.  
 Grist, B. W., & Co. .... Iron Founders.  
 Harbater Bros. & Co. .... Mfrs. Hardware.  
 Harrison, J. .... Brass Founder.  
 Heilman, Fred L. .... Mfr. Nails.  
 Hoffer, Peter. .... Iron, &c.  
 Johnston, Adam & Son. .... Franklin Iron Works.  
 Kaufman, W. M., & Co. .... Iron.  
 Keystone Hardware Mfg. Co.  
 Keystone Iron Co.  
 Knabb, A. .... Mfr. Bolts, &c.  
 Lawrence, Clayton. .... Mfr. Iron.  
 Mellvaine, Wm. & Sons. .... Mfrs. Boiler Plates.  
 Malden Creek Iron Co.  
 Mellert Foundry & Machine Co.  
 Miller, Printz & Co. .... Brass Works.  
 Obert, F. J. .... Boiler Maker.  
 Orr, Painter & Co. .... Mfrs. Stoves & Hollowware.  
 Paxon, L. B. .... Philadelphia & Reading R. R.  
 Penna Hardware Co.  
 Philadelphia & Reading Coal & Iron Co., Rolling Mill.  
 Reading Hardware Co. .... Mfrs. Hdw.  
 Reading Iron Works.  
 Ream, Peter. .... Coppersmith.  
 Rick & Bros. .... Bronze & Iron Works.  
 Seyfert, S. R. .... Rolling Mill.  
 Seyfert, S. & Co. .... Iron Works.  
 Sheets, E. .... Machinists' Supplies.  
 Smith, L. J. .... Millwright.  
 Snell, John L. .... Iron, &c.  
 Stauffer, McKnight & Co. .... Stove Founders.  
 Stephan, Chas. & Co. .... Mfrs. Files.  
 Strepping, Chas. .... Mfr. Files.  
 Sterling, Weidner & Co. .... Boiler Makers.  
 Steinbergh, J. H. .... Mfr. Bolts, Nuts, &c.  
 Eichter, J. L. & Son. .... Iron, &c.  
 Union Foundry & Mfg. Co.  
 Walp, James. .... Sheet Iron Worker.  
 West Reading Boiler Works.  
 Yeager, Boyer & Co. .... Boiler Makers.

**REBUCKS.**

Fisher, W. H. .... Iron Founder.

**REDINGTON.**

Carter, W. J. & Co. .... Iron Works.

**REEDSVILLE.**

Mann, Wm. Jr. & Co. .... Mfrs. Axes

**REGISTER CITY.**

Hawkins, S. .... Machinist.

**REAY.**

Strayer, Abraham. .... Machinist.

**RENOVO.**

Cross, F. J. .... Plumber.  
 Reippel, J. .... Machinist.

**REU.**

Cochran J. & Bro. .... Plumbers.  
 Northrup & Cochran. .... Machinists.

**REYNOLDSVILLE.**

Bland, J. F. .... Machinist.  
 Davis, Emil. .... Machinist.

**RICEVILLE.**

Farrington, E. M. .... Machinist.

**RIDDLERSBURG.**

Kemble Coal & Iron Co.

**RIDGEWAY.**

Hyde, Kline & Co. .... Iron Founders & Machinists.

**RIEGELSVILLE.**

Durham Iron Works.

**RIMERSBURG.**

Kaster, S. H. & Bro. .... Iron Founders.

**RINGGOLD.**

Holbein, Elias A. .... Iron Founder.

**RIVERSIDE.**

Shiffner, Herman. .... Mfr. Files.

**RIXFORD.**

Cavanaugh, Timothy. .... Machinist.  
 Fox & Cavanaugh. .... Machinists.  
 McAndrews, Michael F. .... Boiler Maker.

**ROABING SPRING.**

Blair Iron & Coal Co.  
 Bobb, A. .... Iron Founder.  
 Wike, D. R. .... Millwright.

**ROBERTSDALE.**

Rockhill Iron & Coal Co.

**ROCHESTER.**

Olive Stove Works.  
 Schropp, C. W. .... Sheet Iron Worker.

**ROCHESTER MILLS.**

Gamble, J. M. .... Millwright.

**ROLAND.**

Curtins & Co. .... Iron, &c.

**ROOSEBURGH.**

Leggett, Samuel. .... Mfr. Agl. Impls.

**ROSE POINT.**

Hope Iron Co.

**ROUSEVILLE.**

Hawley, John. .... Machinist.  
 Perry, Wm. .... Boiler Maker.  
 Sickels, Chas. .... Machinery.  
 Smith, Thomas. .... Machinist.

**ROYERS FORD.**

Bean, Harry. .... Farm Machinery.  
 Buckwalter & Co. .... Stove Founders.  
 Grandner, Rogers & Co. .... Iron Founders.  
 Nix & Latshow. .... Plumbers & Gas Fitters.  
 Shantz & Keeley. .... Iron Founders.

**RUSSELLVILLE.**

Miller, Andrew. .... Machinist.

**SACRAMENTO.**

Hayes, Geo. W. .... Millwright.

**SAFE HARBOR.**

Phoenix Iron Co.

**SAINT CLAIR.**

Bowen, A. S. .... Mfr. Shovels.  
 Hart, Samuel. .... Plumber.  
 Quirin, Peter P. .... Machinist.

**SAINT MARY'S.**

Garner, L. H. .... Iron Founder & Machinist.  
 Kaul & Bro. .... Iron Founders & Machinists.

**SAINT PETERSBURG.**

Birnie, W. .... Machinist.  
 Blak-lee Bros. .... Machinists.  
 Boyce, John. .... Boiler Maker.  
 Griffin, Thomas. .... Boiler Maker.  
 Park, F. G. & Co. .... Coppersmiths.

**SALONA.**

Wilson, Samuel. .... Iron Founder.

**SALTSBURG.**

Ellis, D. L. .... Millwright.  
 Jamieson, S. S. Jr. .... Machinist.  
 Rodgers & Blank. .... Iron Founders.  
 Trees, James. .... Millwright.

**SANDY HILL.**

Kuhn, Jacob. .... Millwright.

**SANDY LAKE.**

Eherman, Wm. S. & Son. .... Machinists.

**SANDY POINT.**

Knight, S. H. .... Boiler Maker.

**SAXONBURG.**

Montag &amp; Co ..... Machinists.

**SAXTON.**

Barkla, Wm. .... Huntingdon &amp; Broad Top Mountain

R. R.

Eichelberger, J. A. &amp; E ..... Iron Founders.

**SAYRE.**

Cayuta Forge &amp; Axle Works.

Cayuta Wheel &amp; Foundry Co.

**SCHELLSBURG.**

Evril, J. M. .... Millwright.

Slack, Geo. .... Millwright.

**SCHUYLKILL.**

Moorehall Mfg. Co. .... Iron Foundry &amp; Machine Shop.

**SCHUYLKILL HAVEN.**

Hendricks, Z. T. .... Plumber.

Schuykill Haven Iron Works.

**SCHWENKSVILLE.**

Kehs, Nathaniel ..... Machinist.

**SCOTCH HILL.**

Hackett, L. L. .... Millwright.

**SCOTTDALÉ.**

Everson, Macrum &amp; Co. .... Rolling Mill.

Hill &amp; Kenney ..... Iron Founders.

**SCRANTON.****PLUMBERS, STEAM AND GAS FITTERS.**

Burke, O. T.

Dolphin, P. C.

Doud, W. G. &amp; Co.

Doud &amp; Nichols.

Fish, John B.

Howley, John J.

Lawler, James J.

Maloney &amp; Keeley.

Watson &amp; Dimmick.

Werthamer, John.

**MISCELLANEOUS.**

Barker, Samuel G. .... Mfr. Scales.

Carter, P. .... Mfr. Axes &amp; Scythes.

Dickson Mfg. Co. .... Locomotives, Machinery, &amp;c.

Delaware, Lackawanna &amp; Western R. R. .... Car

Builders.

Drinker, Alfred G. .... Machinist.

Finch &amp; Co. .... Iron Founders &amp; Machinists.

Guesford, Chas. .... Mfr. Files.

Hillside Coal &amp; Iron Co.

Horn, E. S. C. .... Sheet Iron Worker.

Lackawanna Iron &amp; Coal Co. .... Mfrs. Iron &amp; Steel.

Leonard Bros. .... Plumbers.

Mursch &amp; Moore. .... Boiler Makers.

Pike &amp; Hull. .... Mfrs. Edge Tools.

Pike, J. W. .... Mfr. Edge Tools.

Scranton Steel Co. .... Mfrs. Steel Rails.

Scranton Stove &amp; Mfg. Co.

Spencer, A. L. .... Rolling Mill.

Teague, Geo. .... Boiler Maker.

Thomas, J. R. .... Iron Founder.

**SEELYVILLE.**

Gill, F. B. .... Iron Founder.

Welsh, John. .... Iron Founder.

**SEIBERLINGVILLE.**

Fenstermacher, J. .... Millwright.

**SEIDERSVILLE.**

Markle, Reuben. .... Millwright.

**SELIN'S GROVE.**

Holmes &amp; Kolcher. .... Iron Founders.

**SEWICKLEY.**

Drynan, A. .... Plumber.

Patton, John Jr. .... Plumber.

**SHAMBURGH.**

Hoffman, A. A. .... Machinist

**SHAMOKIN.**

Floyd, H. .... Plumber.

Mullen, John ..... Machinist.

Parker, C. E. .... Iron Founder &amp; Machinist.

Sowers &amp; Thomas. .... Iron Founders &amp; Machinists.

**SHANKSVILLE.**

Shank &amp; Walker. .... Millwrights.

**SHARON.**

Boyce, Geo. .... Iron, &amp;c.

Etna Machine Works.

Freeman, F. J. .... Machinist.

Kimberly, Carnes &amp; Co. .... Iron &amp; Nail Works.

McGillroy, Wm. &amp; Co. .... Mac inists.

Moore, R. D. .... Plumber.

Sharon Boiler Works.

Sharon Iron Co.

Valley Iron Works.

Weaver, J. L. .... Plumber.

Westerman Iron Co.

**SHARPSBURG.**

Moorhead, Bros. &amp; Co. .... Mfrs. Iron, &amp;c.

Meyer, W. H. .... Coppersmith.

Wilcox &amp; Co. .... Iron Founders.

**SHARPSVILLE.**

Geddes &amp; Eagan. .... Iron Founders and Machinists.

Gemmill, Jas. R. .... Boiler Maker.

Mount Hickory Iron Co.

Pierce, Jonas J. .... Iron, &amp;c.

**SHEAKLEYVILLE.**

Steele, Abraham &amp; Co. .... Iron Founders.

**SHELLEY'S STATION.**

Heller, Phares. .... Machinist.

**SHELANDOAH.**

Bernhart, John. .... Plumber.

Cather, John. .... Iron F. under.

Water, T. G. .... Plumber.

**SHERIDAN.**

Grimes, Daniel. .... Mfr. Gun Barrels.

Wallace, Jos. W. &amp; Son. .... Machinists.

**SHERMANSDALE.**

Smiley, Wilson ..... Iron Founder.

Stouffer, Wm. .... Millwright.

**SHIMERSVILLE.**

Carl, John. .... Millwright.

Walker, Levi. .... Millwright.

**SHIPPENSBURG.**

Donnelly, John A. .... Iron Founder.

Donley, Samuel. .... Iron Founder.

Lefevre, David. .... Machinist.

**SHIREMANTOWN.**

Brooks, James. .... Millwright

Dill, M. P. &amp; Son. .... Mfrs. Agl. Impls.

Weber, Samuel. .... Mfr. Plows.

**SHOEMAKERTOWN.**

Hammond, C. &amp; Son. .... Mfrs. Edge Tools.

**SHENERSVILLE.**

Lerch, Thos. .... Machinist.

**SIEGFRIED'S BRIDGE.**

Wesner, J. P. .... Millwright.

**SILVER SPRING.**

Chickies Iron Co. .... Mfrs. Iron, &amp;c.

**SINKING VALLEY.**

Donnelly, Samuel. .... Millwright.

**SKINNER'S EDDY.**

Pulja, J. S. .... Machinist.

Smith, Leon. .... Mfr. Edge tools.

**SLACK WATER.**

Sanders, Lewis. .... Millwright.

**SLATINGTON.**

George, David.....Mfr. Agl. Impls.  
McConachie, E.....Machinist.

**SLIGO.**

Hodil, Jacob.....Iron Founder.

**SLIPPERY ROCK.**

Bingham & Sons.....Iron Founders.

**SMICKSBURG.**

Glenn, A. R.....Machinist.  
Lowe, J. K. & Bro.....Iron Founders.

**SMITH'S FERRY.**

Childs, John.....Mfr. Edge Tools.

**SNYDERSVILLE.**

Marsh & Bro.....Iron Founders.

**SOMERSET.**

Somerset Mechanical Works.  
Zimmerman & Snyder.....Iron Founders.

**SOUTH BETHLEHEM.**

Bethlehem Iron Co.....Mfrs. Iron and Steel.  
Lehigh Mfg. Co.....Mfrs. Shovels.  
Lehman, B. E.....Brass Works.  
McKee & Millson.....Boiler Makers.  
Palfrey, W. T.....Boiler Maker.  
Pierce, D. E. & Co.....Mfrs. Valves.  
Weiss, Francis, Jr.....Mfrs. Shovels, &c.

**SOUTH WHITEHALL.**

Foehst, John.....Millwright.

**SPARTANSBURG.**

White & Bedient, Iron Founders and Machinists.

**SPRING CITY.**

Keeley, Oliver B. & Co.....Mfrs. Stoves and Hollow  
ware.  
Spring City Iron Foundry.

**SPRINGDALE.**

Schweitzer, Jos.....Machinist.

**SPRING MILLS.**

Armbruster, G. D.....Millwright.  
Hitner, Daniel O.....Iron, &c.

**SPRINGTOWN.**

Roberts, Jesse.....Machinist.

**SPRUCE CREEK.**

Adams, J. Q.....Mfr. Edge Tools.

**SPRUCE HILL.**

Manger, Leonard.....Millwright.

**STANDARD.**

Standard Iron and Nail Works.

**STANTON'S MILLS.**

Stahl, J. H.....Machinist.

**STEELTON.**

Pennsylvania Steel Co.....Rolling Mill.

**STEINSVILLE.**

Klotz, Willoughby.....Iron Founder.

**STEMTON.**

Lehigh Car Mfg. Co.

**STOCKERTOWN.**

Messinger's S. S. Sons.....Iron Founders.

**STONEBORO.**

Mercer Iron and Coal Co.

**STOUCHSBURG.**

Pottgier, W. S.....Machinist.

**STOYESTOWN.**

Bender, Joseph & Son.....Iron Founders.

**STRASBURG.**

Spiehlman, Henry.....Machinist.

**STRATTONVILLE.**

Wilson, Stewart.....Iron Founder & Machinist.

**STRAUSSTOWN.**

Degler, Geo.....Mfr. Plows.

**STROUDSBURG.**

Keller, J. G.....Plumber & Gas Fitter.  
Landers, F.....Iron Founder.  
Stauffer, G. E.....Iron Founder.  
Tanite Co.....Mfrs. Emery Machinery.

**SUGAR VALLEY.**

Heller, Emanuel.....Iron Founder.

**SUNBURY.**

Batman, Jno. J.....Iron Founder.  
Bowly, Mark C.....Machinery.  
Reed, J. B.....Plumber.  
Rohrbach, Geo. & Sons.....Iron Founders.  
Slaymaker & Co.....Machinery.  
Waltz, H. J.....Plumber.

**SUSQUEHANNA.**

Wilder, F. M., New York, Lake Erie & Western  
R. R.

**SWAN.**

Ellis, W. S.....Iron Founder & Machinist.

**SWATARA STATION.**

Erb, Ed. B.....Machinery, etc.  
Swatara Furnace Co.....Mfrs. Iron.

**TAMAQUA.**

Allen Iron Works.  
Carter, Allen & Co.....Iron Founders & Machinists.  
Hadesty, J. M.....Plumber.  
Greenwood Rolling Mill Co.  
Miller & Wood.....Millwrights.  
Pfeifer, Solomon.....Plumber.  
Robinson & Co.....Iron Founders.  
Tamaqua Mfg. Co.....Iron Founders & Machinists.  
Walter's, Henry Sons, Iron Founders & Machinists.

**TARENTUM.**

Stevener, Fred'k.....Iron Founder.

**TAYLORSTOWN.**

Buchanan, A.....Millwright.

**TELFORD.**

Priester, R. L.....Machinist.

**TEMPLE.**

Temple Iron Co.  
Trout, W. B.....Millwright.

**TERRE HILL.**

Newpher, Wm.....Millwright.

**TERRYTOWN.**

Violl, Francis.....Millwright.

**THORNDALE.**

Thorndale Iron Works.

**THREE RIVERS.**

Peavy, Joseph.....Millwright.

**THURLOW.**

Chester Pipe & Tube Co.  
Green, W. H.....Brass Founder.

**TIDIOUTE.**

Campbell, W.....Machinist.  
Carson, R. J. & Co.....Machinists.  
Kerr, G. H.....Iron Founder & Machinist.  
McIntyre, A. J.....Machinery.  
Thornton, Thos.....Machinery.

**TITUSVILLE.**

Allen & Co. .... Machinery.  
 Ames & Keese ..... Mfrs. Engines & Boilers.  
 Carr, G. B. .... Machinery.  
 Chandler, W. H. .... Iron Works.  
 Eames Petroleum Iron Works.  
 Eberly, H. J. & Co. .... Sheet Iron Works  
 Foster & McKay ..... Machinery.  
 Gibbs & Sterrett Mfg. Co. .... Engines & Machinery.  
 Guiland, W. .... Plumber.  
 Haehn & Ringerheimer ..... Boiler Makers.  
 Harris, Junius ..... Machinery.  
 Hunt, H. T. .... Iron Founder & Machinist.  
 Joy, T. C. .... Mfr. Steam Heaters.  
 Kingsland, W. W. .... Brass Founder.  
 McManus, M. B. .... Plumber.  
 Moore, Adam ..... Plumber.  
 Moran, Wm. .... Plumber.  
 Morgan, W. H. .... Plumber.  
 Payne, W. S. .... Plumber.  
 Roberts, E. A. L. .... Iron Founder & Machinist.  
 Young & Locke ..... Machinery.  
 Zook, D. M. .... Plumber.

**TOPTON.**

Kaufman, Wm. M. .... Iron, etc.

**TOUGHKENAMON.**

Hand, S. Ashton ..... Machinist.

**TOWANDA.**

Bostley, R. A. & Co. .... Nail Works.  
 Heath, F. C. .... Mfr. Edge Tools.  
 Johnson Mfg. Co. .... Iron Foundry & Machine Shop.  
 Means, J. F. & Co. .... Iron Founders.  
 Peck, Geo. S. .... Millwright.  
 Towanda Foundry Co.  
 Williams, Edward ..... Plumber & Gas Fitter.

**TREICHLERS.**

Treichler, Henry ..... Millwright.

**TREMONT.**

Brower, C. W. .... Machinery.  
 Ferg, Adam ..... Iron Founder & Machinist.  
 Wolf, A. D. .... Iron, etc.

**TROY.**

Enterprise Mfg. Co. .... Mfrs. Agl. Impls.  
 Mitchell, Austin ..... Iron Founder.

**TUNK HANNOCK.**

Gearheart, C. D. .... Iron Founder.  
 Miller & Avery ..... Iron Founders.

**TURKEY CITY.**

Baynham, James ..... Machinery.

**TYRONE.**

Anderson & Co. .... Mfrs. Steel.  
 Burley, S. D. .... Millwright.  
 Cutler, H. W. .... Plumber & Gas Fitter.  
 Kelley, J. M. .... Iron Founder.  
 Kurtz, J. H. .... Plumber.  
 Mann, Wm., & Co. .... Mfrs. Edge Tools.  
 Neving, W. H. .... Machinist.  
 Pawling, W. H. .... Boiler Maker.  
 Siemens-Anderson Steel Co.

**ULYSSES.**

Baker, S. C., & Co. .... Iron Founders.

**UNION CITY.**

Dunmeyer, Wm. .... Machinist.  
 Industrial Iron Works.  
 Thompson, P. H. .... Machinist.  
 Union City Iron Works.

**UNION FORGE.**

Reinbold, B. F. .... Millwright.

**UNIONTOWN.**

Delaney, Henry ..... Machinist.  
 Frankenberg & Moore ..... Iron Founders.  
 Hadden, Joseph M. .... Iron, &c.  
 Jacqueline, Thomas ..... Iron Founder.

**UNIONVILLE.**

McDonald, Harmon ..... Millwright.

**UPSONVILLE.**

Cole, Loudon B. .... Millwright.

**VALLEY FORGE.**

Ford & Hallman ..... Machinists.

**VERA CRUZ.**

Mohr, Henry ..... Mfr. Mill Picks, &c.  
 Moyer, George ..... Machinery.

**VERONA.**

Kerr, A. .... Iron Founder.

**VILLAGE GREEN.**

Hannum, E. P. .... Machinery.

**VINEMONT.**

Warner, Jeremiah ..... Millwright.

**VOGANSVILLE.**

Carpenter, Ephraim ..... Millwright.

**WALLACE.**

Cornag, John ..... Iron Works.

**WALNUT.**

Rodgers, John H. .... Iron Founders.

**WALNUT PORT.**

Grosch & Bowman ..... Iron Founders & Machinists.

**WAMPUM.**

Wampum Iron Co.

**WARFORDSBURG.**

Cooper, Geo. .... Millwright.  
 Cooper, Wm. .... Millwright.

**WARREN.**

Clark, Alfred ..... Iron Founder & Machinist.  
 Cone & Collins ..... Machinists.  
 Schermerhorn, S. P. .... Machinist.  
 Simpson, W. H., & Co. .... Plumbers.  
 Struthers, Wells & Co. .... Iron Works.  
 Warren County Hardware Co. .... Mfrs. Hdw.

**WARRIOR'S MARK.**

Gray & Nimmoek ..... Iron Founders.

**WASHINGTON.**

Bartlett, E. .... Iron Founder.  
 Lindsay, Oliver ..... Machinist.  
 Mellinger, H. .... Mfr. Edge Tools.

**WATERSIDE.**

Baird, George ..... Machinist.  
 Snowden, Joseph ..... Iron Founder.

**WATSONTOWN.**

Morris, D. G. .... Mfr. Iron Fences.  
 Pardee, Snyder & Co. .... Machinists.

**WATTS' STATION.**

Watts, H. M., & Son ..... Mfrs. Iron, &c.

**WAVERLY.**

Sherman, G. E. .... Iron Founder.

**WAYNESBORO.**

Conley, J. J. .... Millwright.  
 Frick & Co. .... Mfrs. Engines & Boilers.  
 Geiser Mfg. Co. .... Boilers & Agl. Impls.

**WAYNESBURG.**

Bowers, C. E., & Co. .... Iron Founders.  
 Carter, S. E. .... Machinist.

**WEISSPORT.**

Carbon Rolling Mill Co.  
 Lehigh Valley Emery Co. .... Machinery.  
 Miner Bros. .... Iron Founders.

**WELLSBORO.**

Davenport, C. W. .... Plumber.  
 Kress, W. C. .... Iron Founder.

**WERNERSVILLE.**

Hossler, Siegfried & Co. .... Mfrs. Fire Arms.

**WEST BRIDGEWATER.**

Campbell, W. S. .... Iron Founder.  
 Darrah, M. & S. H. .... Iron Founders & Machinists.  
 Hanny, T. L. & Co. .... Iron Founders & Machinists.

**WEST CHESTER.**

Apple, Theo. P. .... Plumber.  
 Broomall, Stott & Co. .... Machinists.  
 Cope, Edge T., & Sons. .... Iron Founders.  
 Embree, Peirson ..... Machinist.  
 Fitzsimmons, Geo., & Son ..... Plumbers.  
 James Bros. .... Plumbers.  
 Palmer, R. E. .... Plumber & Gas Fitter.  
 Sharpless, P. M. .... Machinist.  
 Williams & Darlington. .... Iron.

**WEST DECATUR.**

Hopkins, J. C. .... Iron Founder.

**WEST DEMASCUS.**

Williams, W. W. .... Millwright.

**WEST FAIRVIEW.**

Harrisburg Nail Works.

**WESTFIELD.**

Baker, Albert. .... Machinist.

**WEST GROVE.**

Conard, Isaac. .... Plumber.  
 Pyle, Joseph. .... Plumber.  
 Savery, E. .... Machinery.

**WEST LEBANON.**

Collins, Geo. W. .... Machinery.

**WEST LENOX.**

Hill, P. .... Millwright.

**WEST MIDDLESEX.**

Russell, J. W. .... Iron Founder & Machinist.  
 Wheeler Iron Co.

**WEST MILTON.**

Anderson, John ..... Machinist.  
 Cheney, George ..... Machinist.

**WEST NEWTON.**

Marsh & Young. .... Iron Founders.  
 Shoaf & Son. .... Iron Founders.

**WEST PENN.**

Snyder & Son. .... Machinists.

**WEST POINT.**

West Point Engine & Machine Works.

**WHEATLAND.**

Wheatland Bessemer Steel Co.

**WHITE HAVEN.**

Levan, Jno. W. & Son ..... Millwrights.  
 Wallace, Samuel ..... Iron Founder.

**WHITE MARSH.**

Conard, A. & I. .... Mfrs. Augers.

**WILKES-BARRE.**

Behee, Adam. .... Iron Founder.  
 Bennett & Co. .... Iron & Steel.  
 Carpenter, B. G. & Co. .... Plumbers & Gas Fitters.  
 Dickson, Mfg. Co. .... Mfrs. Hardware.  
 Forve, Peter. .... Plumber.  
 Gates, Horatio C. .... Iron Founder.  
 Graff, Frederick. .... Mfr. Mill Picks.  
 Kaiser, Wm. .... Plumber.  
 Kintze, Gustav. .... Mfr. Files.  
 Lee, Arms Co. .... Mfrs. Pistols.  
 Mooers, G. W. .... Iron Founder.  
 Shelley, Geo. .... Brass Founder.  
 Vulcan Iron Works.  
 White, E. J. .... Mfr. Edge Tools.

**WILKINSBURGH.**

Deeds, Wm. S. .... Sheet Iron Worker.

**WILLIAMSBURG (Blair Co.)**

Ellsworth, J. F. .... Millwright.  
 Riley & Lancer. .... Iron Founders.  
 Royer, John. .... Iron.  
 Swartz, John. .... Iron Founder.

**WILLIAMSPORT.****MACHINISTS.**

Arthur, John. .... Johnson, E. C. & Co.  
 Aschenbach, S. & Co. .... Moltz Bros.  
 Butler & Arndt. .... Olmstead, C. D.  
 Dawson, Frank. .... Rowley & Hermance.  
 Goodrich, J. E. .... Williamsport Mchn. Co.  
 Hogan, E. W.

**MISCELLANEOUS.**

Andrews, E. .... Mfr. Saws.  
 Aschenbach, S. & Co. .... Iron Founders.  
 Colver, C. P. .... Machinery.  
 Corcoran & Co. .... Iron.  
 Croll, Geo. W. .... Plumber & Gas Fitter.  
 Davis & Thompson. .... Mfrs. Rakes.  
 Graff, Frederick. .... Mfr. Files.  
 Hoyland, George. .... Mfr. Saws.  
 Hubbard, D. B. .... Mfr. Pumps & Engines.  
 Jenkins, Schreyer & Co. .... Rolling Mill.  
 Keeler, E. & Co. .... Boiler Makers.  
 Kerns, A. J. Jr. .... Mfr. Saws.  
 Linck, J. H. .... Plumber.  
 Mack, Thos. .... Plumber.  
 Millsbaugh, Bros. .... Iron Founders.  
 Milton Iron Co. .... Rolling Mill.  
 National Tool Co.  
 Standard Iron & Nail Works.  
 Stones, J. C. .... Machinists' Supplies.  
 Tragle & Reinhart. .... Mfrs. Files.  
 Turner, Jacob. .... Plumber.  
 Valley Iron Works.  
 Van Buskirk & Sherer. .... Iron.  
 Weed, F. R. & Co. .... Iron Workers.  
 Williamsport Boiler Works.

**WILLOW GROVE.**

Newport, Wm. C. & Co. .... Mfrs. Agl. Impl'ts.

**WILLOW HILL.**

Fleming, Samuel. .... Machinist.

**WINFIELD.**

Beaver & Co. .... Iron.

**WINTERBURN.**

Gould, P. C. .... Millwright.  
 Hilyard, D. .... Millwright.

**WOLF CREEK.**

Emery, J. N. & Sons. .... Mfrs. Agl. Imps.  
 Weakley, J. C. .... Millwright.

**WOMELSDORF.**

Taylor, W. & B. F. .... Mfrs. Iron.  
 Tragle, W. H. .... Mfr. Files.

**WOODBURY.**

Brown & Stern. .... Iron Founders.  
 Griffin, A. D. .... Iron Founder.

**WOODVILLE.**

Keene, W. H. .... Car Builder.

**WRIGHTSVILLE.**

Wrightsville Iron Co.

**WYMPY GAP.**

Darwart, David. .... Machinist.  
 Green, Jno. .... Iron Founder & Machinist.

**WYOMING.**

Frear, Robt. R. .... Iron Founder.  
 Mathers, E. C. .... Millwright.  
 Pettibone, Payne & Son. .... Mfrs. Shovels.  
 Wilde, Jno. .... Mfr. Iron Fences.

**YARDLEYVILLE.**

White, L. L. .... Machinery.

**YATES.**

Dakin, C. F. .... Millwright.

**YEAGERSTOWN.**

Mann, Wm., Jr., &amp; Co.....Mfrs. Edge Tools.

**YELLOW HOUSE.**

Greisemer, Irwin.....Machinist.

**YORK.**

Baughner, Geo. F.....Iron Founder.  
 Billmeyer & Small Co.....Machinists.  
 Bollinger, O. J.....Machinist.  
 Burnham, N. F.....Mfr. Water Wheels.  
 Burnham Bros.....Mfrs. Water Wheels.  
 Devers, C. M.....Plumber.  
 Eagle Bolt Works.  
 Krwin, W. H. H.....Brass Founder.  
 Farquhar, A. B.....Machinist.  
 Pike, J. W.....Ornamental Iron Works.  
 Frey, Motter & Co.....Iron Founders.  
 Frey & Broomall.....Brass Works.  
 Goodling, Henry T.....Millwright.  
 Heckett, Daniel & Son.....Sheet Iron Workers.  
 Heidler, G. L.....Mfr. Agl. Impts.  
 Herman, John.....Plumber.  
 Hoff, John M.....Mfr. Water Wheels.  
 Inners, Geo.....Millwright.  
 Klinefelter, C. A.....Mfr. Saws.  
 Koons, J. H.....Plumber.  
 Laughlin, John.....Mfr. Straw Cutting Machines.  
 Loucks & Smyser.....Mfrs. Steam Engines, Water  
 Wheels, &c.  
 Mumper & Bond.....Mfrs. Chains.  
 Neff, Chas. H.....Mfr. Bolts.  
 Peeling, Josiah.....Millwright.  
 Root & Case.....Mfrs. Scales.  
 Schall, Michael.....Car Builder.  
 Schall, Steacy & Co.....Rolling Mill.  
 Schmidt, John C.....Mfr. Chains.  
 Scholl, John.....Mfr. Files.  
 Schwenk, Andrew.....Mfr. Files.  
 Sheffer, Addison.....Mfr. Chains.  
 Smith, S. M.....Mfr. Water Wheels.  
 Smyser, E. G.....Iron Worker & Machinist.  
 Spangler, J. W.....Mfr. Agl. Impts.  
 Strayer, J. H.....Machinist.  
 Striewig Henry.....Mfr. Agl. Impts.  
 Wambaugh, John.....Machinist.  
 Ward, John.....Machinist.

**YORK FURNACE.**

Bair, John &amp; Co.....Iron, &amp;c.

**YORK NEW SALEM.**

Pickles, B.....Machinist.

**YORK SULPHUR SPRINGS.**

Lerew, J. G.....Machinist.

**YOUNGSTOWN.**

Bollinger, G. W.....Millwright.

**YOUNGSVILLE.**

Currie, J. T.....Millwright.

**ZIEGLERSVILLE.**

Grebe, Fredk.....Brass Founder.

**RHODE ISLAND.****BRISTOL.**

Herreshoff Mfg. Co.....Mfrs. Boilers.

**CENTRAL FALLS.**

Collins & Son.....Machinists.  
 Central Falls Boiler Works.  
 Evans, C. V.....Steam & Gas Fitter.  
 New American File Co.  
 Newell, Wm. & Son.....Brass Founders.  
 Sullivan, D.....Boiler Maker.  
 Union Steam & Gas Pipe Co.  
 Wilmarth, O. W. & Co.....Sheet Iron Workers

**EAST GREENWICH.**

Arnold, Benj.....Machinist.

**EAST PROVIDENCE.**

Field, Chas. H.....Mfr. Lathes  
 Monroe, A. G.....Plumber.

**EXETER.**

Boss, Joshua.....Mfr. Rakes.

**FOSTER CENTRE.**

Walker, Pardon.....Iron Founder.  
 Walker, S. & A.....Mfrs. Plows.

**GEORGIATVILLE.**

Bouchard, John.....Sheet Iron Worker.

**HILLS GROVE.**

Rhode Island Malleable Iron Works.

**HOPE VALLEY.**

Nichols &amp; Langworthy.....Machinery.

**NEWPORT.**

Barker Bros.....Gas Fitters.  
 Conroy, P. F. & Co.....Plumbers.  
 Cremin & Butler.....Plumbers.  
 Greason, Clarence.....Plumber.  
 Langley & Sharp.....Sheet Iron Workers.  
 Lyon, Joseph M.....Plumber.  
 Lyon, Joseph F.....Brass Founder.  
 McAdams & Openshaw.....Plumbers.  
 Oman, R. L.....Plumber.  
 Slocum, Geo. S.....Machinist.  
 Wilks, Frank H.....Machinist.

**OLNEYVILLE.**

Miller Iron Co.....Mfrs. Iron.

**PASCOAG.**

Hopkins, A. &amp; Co.....Machinists.

**PAWTUCKET.**

Arnold, James A.....Machinist.  
 Bosworth Machine Co.....Machinists.  
 Brown, James.....Machinist.  
 Buckley, M. & Co.....Mfrs. Files.  
 Carpenter, J. M.....Mfr. Dies.  
 Carpenter, E. P. & Co.....Plumbers.  
 Cole & Bro.....Fire Engine Builders.  
 Collins & Son.....Machinists.  
 Collyer, N. S. & Co.....Machinists.  
 Cope, Samuel.....Mfr. Files.  
 Danz, W. G.....Plumber.  
 Fales & Jenks Machine Co.....Machinists.  
 Haskell, W. H. Co.....Mfrs. Bolts & Nuts.  
 Jackson, Samuel & C.....Plumbers.  
 Kenyon, Whitaker & Smith.....Mfrs. Water Wheels.  
 McEvoy, P. A. & Co.....Plumbers.  
 Martin, T. A.....Plumber.  
 New American File Co.  
 Pawtucket Mfg. Co.....Mfrs. Bolts.  
 Pawtucket Gas & Steam Pipe Co.  
 Pawtucket Tack Co.  
 Payne, Geo. W. & Co.....Machinists.  
 Potter, John H.....Machinist.  
 Reed, Ervin.....Plumber.  
 Stewart, Hugh.....Plumber.  
 Tenney, Alfred E.....Mfr. Fire Engines.  
 White, J. S.....Iron Founder.

**PHOENIX.**

Bradford, Geo. B.....Sheet Iron Worker.  
 Coloin, S. & Co.....Machinists.  
 Lamphier Machine Co.....Cotton Machinery.

**PORTSMOUTH.**

Taunton Copper Co.

**PROVIDENCE.****MACHINERY.**

American Ship Co.....East River, nr. Red Bridge.  
 Budlong, Wm.....24 Middle.  
 Cruickshank, D. B.....243 Dyer.  
 Deming, Morris B.....78 Orange.  
 Gibson, Geo. J.....361 Eddy.  
 Harris, Wm. A.....Cor. Elm & Grove.  
 Hunt, David.....4 Maple.  
 Hunt, Joshua.....85 Bellevue.  
 Mason, Volney W. & Co.....Lafayette, nr. High.  
 Providence Machinery Agency.....564 Eddy.  
 Shackford, A.....105 Orange.  
 Sullivan, D.....23 Weybosset.

## PROVIDENCE—Continued.

## MACHINISTS.

American Machine Co.	270 Westminster.
Armington & Sins.	
Brown & Sharp Mfg. Co.	Promenade near Park.
City Machine Co.	Harris Ave., cor. Acorn.
Cruikshank, Geo. M.	286 Dyer.
Dawson, P. W.	24 Callender.
Diamond Emery Wheel & Machine Co.	Beverly cor. Mason.
Elm Street Machine Shop.	Elm cor. Butler.
Franklin Foundry & Machine Co.	Charles above Randall.
Gladding, Henry C.	21 Friendship.
Granger Foundry & Machine Co.	101 Gaspee.
Heathcote, John.	176 Eddy.
Hicks, Gideon.	444 So. Main.
Hill, Thos. J.	564 Eddy.
Hope & Co.	162 Cove.
Mooney, John.	145 Pine.
Parkinson, Edw.	151 Dorrance.
Rhode Island Machine Co.	89 Aborn.
Shaw, W.	67 Friendship.
Star Tool Co.	Mason cor. Beverly.
Tillinghast, J. A.	409 Pine.
Vanlohe, J. C.	49 Weybosset.

## PLUMBERS, STEAM AND GAS FITTERS.

Anden, Clinton S.	148 W. River.
Brickley, J. G.	302 S. Main.
Burdick Bros.	95 Smith.
Burton, David.	110 Eddy.
Carey, Jno. L., & Co.	379 High.
Carr, Geo. M.	143 Pine.
Conroy, Jas. C.	277 to 281 N. Main.
Costine, Wm.	365 N. Main.
Dart, E. M.	35 Point.
Davis, Jas., & Son.	187 Eddy.
Finley, D. H.	33 & 35 Peck.
Fuller, J. S.	125 1/2 Broad.
Greeley, Michael.	58 Charles.
Heath, W. G.	175 Eddy.
Holmes, Daniel & Co.	61 Eddy.
Hudson & Goff.	6 Cranston.
Kennon, L. V.	42 Sutton.
Law, Chas.	13 Mathewson.
Lenahan, Michael.	13 Waterman.
McKenzie, John, & Co.	420 High.
Meehan, P. W.	4 & 6 Oakland.
O'Connor, Patrick.	21 College.
Ogden, Henry.	17 Meeting.
Onslow & Spalding.	5 P. O. Court.
Pearce, Chas.	78 Wickenden.
Pearce, E. A., & Co.	293 Broad.
Phillips, Thos., & Co.	75 to 85 S. Main.
Reavey & Smith.	25 Potter.
Ruth, H. A.	3 Crawford.
Sheehan, Edward.	405 Potter's Ave.
Shirley, Jno. R.	96 Pine.
Smith, Thos., & Bro.	83 Friendship.
Stacy, C. F. & Co.	10 Moulton.
Strong, R. D. & Co.	998 High.
Thompson, W. B.	388 High.
Thornley, G. W.	74 Orange.
Tierney, P. & J.	81 High.
Tompkins, J. R.	38 Laura.
Whipple, W. L.	47 and 49 Manton Ave.
Williams, T. M. S.	63 Lilac.
Wright, Jno. & Co.	23 Howell.

## MISCELLANEOUS.

Allen, E. J., Coppersmith.	217 and 219 S. Main.
Allenson, J., Coppersmith.	9 Steeple.
American Screw Co.	588 Eddy.
Angell Water Wheel Co.	Calender St.
Anderson, J. H.	New York, Providence and Boston R. R.
Barstow Stove Co., Mfrs. Stoves.	Point, cor. Chestnut.
Baxter, P. W., Mfr. Safes.	43 Lippett.
Bennett, Bradford, Millwright.	Elm St.
Blackwood, James, Boiler Maker.	442 S. Main.
Clundell, Henry & Co., Brass Founders.	35 Clifford.
Builders' Iron Foundry.	22 Coddling.
Carpenter & Bowen, Iron Founders.	85 Aborn.
Carty, Jno. A., Brass Founier.	Blackston, near Eddy.

## PROVIDENCE—Continued.

Chatterton, Geo., Mfr. Files.	25 Randall.
Colvin, T. H., Iron Founder.	150 Cove.
Congdon, Carpenter & Co.	Iron and Steel, 81 Canal.
Corliss Safe Mfg. Co.	159 Cove.
Corliss Steam Engine Co.	158 Cove.
Crowell, Abram & Co.	Mfrs. Iron Fences, 161 Eddy.
Darling, Brown & Sharpe.	Mfrs. Steel Rules, Promenade, near Park.
Darling, M. V. B., Mfr. Brass Goods.	32 Elm.
Davenport, Geo. S., Coppersmith.	108 Dorrance.
Evans, Duty, Iron and Steel.	125 Dyer.
Fall River Iron Works Co.	70 and 71 S. Water.
Fenner, W. H., Coppersmith.	129 Broad.
Franklin Foundry and Machine Co.	Charles, above Randall.
Fuller Iron Works.	416 and 418 S. Main.
Granger Foundry and Machine Co.	101 Gaspee.
Griggs, Albert.	Providence & Worcester R. R.
Hicks, R. W., Boiler Maker.	444 S. Main.
Ingalls' Mfg. Co., Chains.	30 Snow.
Kerr, Williams, Mfr. Tools.	235 Westminster.
Kilton, Warren & Co.	Iron and Steel, cor. Exchange.
McWilliams Mfg. Co., Mfrs. Tools.	121 Orange.
Manchester, Jas. B., Coppersmith.	190 Eddy.
Manton, Jos. P., Iron Founder.	7 College.
Mount Hope Iron Co.	52 S. Water.
Miller Iron Co.	cor. S.
Newman, Israel, Millwright.	20 Sabin.
New England File Co.	Mfr. Hand Cut Files, 101 Friendship.
Nicholson File Co.	118 Acorn.
Ordway, A. L., Iron, &c.	25 Westminster.
Phoenix Iron Foundry.	Elm cor. Eddy.
Providence Brass Foundry.	460 Eddy.
Providence File Works.	170 Dyer.
Providence Steam Engine Co.	373 S. Main.
Providence Steam & Gas Pipe Co.	137 Eddy.
Providence Tool Co.	148 W. River.
Rhode Island Coupling Co.	32 Middle.
Rhode Island Horse Shoe Co.	31 Exchange.
Rhode Island Locomotive Works.	Hemlock cor. Valley.
Rhode Island Malleable Iron Works.	564 Eddy.
Rhode Island Metal Co.	Meadow cor. Summer.
Richards, Isaac P., Mfr. Punches.	118 Acorn.
Richardson, G. T., Providence & Springfield R. R.	
Ruff, Chas. A., Mfr. Cutlery.	50 Dorrance.
Salmon, Geo., Coppersmith.	105 Orange.
Sawyer, C. B., Coppersmith.	10 Harkness.
Schmid, Jno. M. & Son, Mfrs. Cutlery.	259 Westminster.
Smith, Amos D., Brass Founder.	219 Eddy.
Spicers & Peckham, Mfrs. Stoves.	22 Exchange Place.
Sprague Mowing Machine Co.	55 Sprague.
Thatcher, J. H., Mfr. Files.	54 Friendship.
Tillinghast, L. H. & Co.	Plumbers' Supplies, 123 Dorrance.
Tower, James H., Iron Fences.	Friendship, cor. Page.
Waterbury Brass Co.	189 Eddy.
Wardwell, Benj., Mfr. Stoves.	56 Weybosset.
White, Stillman, Brass Founder.	1 Bark.
Willefs Mfg. Co., Mfrs. Tools.	201 & 203 Eddy.
Winsor, Ira & Co., Gas & Steam Pipes.	122 Dorrance.
Wyatt, Thos., Mfr. Chains.	Cor. Wyatt.

## RICHMOND (Carolina Co.)

Tucker, Welcome C.	Machinist.
--------------------	------------

## RIVER POINT.

Brayton, L. & Co.	Iron Founders.
Colvin, S. & Co.	Machinists.

## VALLEY FALLS.

Rhode Island Horse Shoe Co.	
Valley Falls Iron Foundry Co.	

## WARREN.

Brown, Geo. S.	Gas & Steam Fitter.
----------------	---------------------



**WESTERLY.**

Cottrell, C. B. & Co. .... Mfrs. Printing Presses.  
 Cressy, H. L. & Co. .... Plumbers.  
 Fyffe, James. .... Plumber.  
 Freshwick, W. .... Gas Fitter.  
 Stillman, T. V. & V. C. .... Machinists.  
 Woodard, N. A. & Co. .... Machinists.

**WOONSOCKET.**

Briggs, W. H. .... Machinist.  
 Cass, J. J. .... Mfr. Agl. Impts.  
 Follet, S. H. .... Machinist.  
 Fuller Machine Co. .... Machinists.  
 Groves, Peter. .... Plumber.  
 Hautin Sewing Machine Co. ....  
 Howard, J. B. .... Machinist.  
 Miller, Geo. W. .... Machinist.  
 Talcott, C. W. .... Plumber.  
 Wilcox, D. E. .... Mfr. Agl. Impts.  
 Woonsocket Horse Nail Co.  
 Woonsocket Machine Co.

**SOUTH CAROLINA.****ANDERSON COURT HOUSE.**

Dwyer, R. F. .... Machinist.  
 Gerrard, Thos. .... Machinist.

**BAMBERG.**

Howard, A. M. E. .... Machinist.

**BEAUFORT.**

Whitman, J. A. .... Machinist.

**BLACKS STATION.**

Wells Bros. .... Millwrights.

**BLACK STOCKS.**

McKeown, W. O. .... Machinist.

**CHARLESTON.****PLUMBERS, STEAM & GAS FITTERS.**

Adams, Damon & Co. .... Kennedy, Wm.  
 Carey, J. J. .... Meacher, Geo. W.  
 Cavanaugh & Welch .... Paddon, W. F.  
 Guillemin, P. L. .... Riddock, J.  
 Hallis, John. .... Vogt, F.  
 Hyer, James S.

**MISCELLANEOUS.**

Boersch, J. C. .... Coppersmith.  
 Brotherhood F. & Co. .... Machinists' Supplies.  
 Bull, E. .... Coppersmith.  
 Cameron & Barkeley. .... Iron & Rail Road Supplies.  
 Charleston Iron Works.  
 Cochran, E. P. J. .... South Carolina R. R.  
 Darby, Fred. .... Coppersmith.  
 Duncan A. & Son. .... Boiler Makers.  
 Hughes, Samuel. .... Machinist.  
 Magill, R. C. .... Machinist.  
 Miller & Kelly. .... Machinists.  
 Ortmann, F. & J. .... Iron Workers.  
 Smith & Valk. .... Machinists.  
 Valk & Muddock. .... Iron Founders.  
 Walker, W. H. .... Machinery.  
 Wademyer, H. .... Iron Worker.  
 Williams, Geo. W. Jr. & Co. .... Iron Works.

**CHESTER.**

Moffitt, W. E. .... Machinist.

**COLUMBIA.**

Alexander, John. .... Iron Founder.  
 Dial, Geo. L. .... Machinist.  
 Diecks & Co. .... Machinists.  
 Green, J. H. Charlotte, Columbia & Augusta R. R.  
 Plumer, E. C. .... Gas Fitter.  
 Plumer, R. A. .... Gas Fitter.  
 Shields, Geo. A. .... Iron Works.  
 Tozer & Dial. .... Machinists.

**DONALDSVILLE.**

Wilson, Hugh. .... Millwright.

**GAFFNEY'S.**

Goforth, P. P. .... Millwright.

**GEORGETOWN.**

Dawley, Joseph C. .... Plumber.

**GOSHEN HILL.**

Spencer, James Mc. .... Machinist.

**GREENVILLE.**

Adams, John. .... Millwright.  
 Greenville Iron & Machine Works.  
 McDonald, R. H. .... Iron Founder.

**GREER'S STATION.**

Dickson, J. W. .... Machinist.

**HONEA PATH.**

Haines, E. .... Millwright.

**LAURENS.**

Hix, J. S. .... Machinist.

**MARION.**

Macduffie E. .... Machinery.

**NEWBERRY.**

Halfacre, Perry .... Machinist.  
 Speake & Bro. .... Machinery.

**PORT ROYAL.**

Riley, Geo. .... Port Royal & Augusta Railway.

**RICHBURG.**

Fennell, J. F. .... Millwright.

**SPARTANSBURGH.**

Carver, W. C. .... Millwright.

**UNION.**

Fowler, G. W. .... Millwright.

**WESTMINSTER.**

Stribling, John V. .... Machinist.

**TENNESSEE.****ATHENS.**

McKeldin, W. B. & Co. .... Founders & Machinists.

**BELL BUCKLE.**

Wallis, Chas. G. .... Mfr. Plows.

**BIG BARREN.**

Kincaid, A. S. .... Mfr. Iron.

**BOLIVAR.**

Parran, D. W. .... Machinist.  
 Swanson, J. A. .... Iron Founder.

**BRISTOL.**

Dixon, Smith & Co. .... Founders & Machinists.  
 Nutly, Mc M. & Bro. .... Millwrights.  
 Stone, Riley. .... Millwright.  
 Stone, Samuel. .... Millwright.

**CHATTANOOGA.**

Ashley, W. C. .... Sheet Iron Worker.  
 Borchering, E. W. & Co. .... Mfrs. Saws.  
 Cahill, J. T. .... Iron Founder.  
 Chattanooga Foundry & Pipe Works.  
 Chattanooga Iron Co.  
 Chattanooga Saw Works.  
 Collins, D. B. .... Plumber.  
 Enterprise Machine Works.  
 Fleming, Patrick. .... Plumber.  
 Giles, D. & Co. .... Iron Founders  
 Hazelhurst, Geo. H. .... Rolling Mill.  
 James, C. S. & Co. .... Rail Road Supplies.  
 King, Wm. & Co. .... Iron Founders.  
 Leighton, John. .... Mfr. Steel.  
 Lookout Rolling Mill Co.  
 Lowe, S. B. .... Machinery.  
 Lowe & Kirk. .... Machinists.  
 McQuade, H. A. & Co. .... Plumbers & Engine  
 Builders.  
 Powell Iron & Nail Co.  
 Providence Iron & Steel Works.  
 Roane Iron Co.  
 Sanders, Newall & Co. .... Mfrs. Plows

**CHATTANOOGA—Continued.**

Souther Pump & Pipe Co.  
 South Tredegar Iron Co.  
 Wagner, Ambrose.....Brass Founder.  
 Warner, J. C.....Iron, &c.  
 Wasson Car & Foundry Co.  
 Webb, Alfred & Co.....Boiler Makers.  
 Wheeland, Geo. W.....Founder & Machinist.  
 Wilcox, Harry.....Plumber & Gas Fitter.  
 Wilder Machine Co.  
 Wilson, J. M.....Boiler Maker.

**CLARKSVILLE.**

Clarksville Plow Co.  
 Meriwether & Patch.....Mfrs. Plows.  
 Whitfield, Bates & Co.....Iron Founders.

**CLEVELAND.**

Weller & McLain.....Iron Founders.

**CLIFTON.**

Marion, L. B.....Iron Founder.

**COATSTOWN.**

Nemons, G.....Millwright.

**COLUMBIA.**

Addisson, H.....Plumber.  
 Addisson, John.....Plumber.  
 Napier Iron Mfg. Co.  
 Shockley & Leonard.....Machinists.  
 Wright, J. T. & Bro.....Mfrs. Plows.

**DANDRIDGE.**

Bolinger, G. W.....Millwright.

**DANVILLE.**

La Grange Iron Co.

**DOVER.**

Cumberland Iron Works.

**DYER STATION.**

Hearn & McDaniel.....Iron Founders.

**EUCHEE.**

Acuff & Kile.....Brass & Iron Founders.  
 Hill & Kendrick.....Iron.

**FAYETTEVILLE.**

Azall, Henry.....Millwright.

**FRIENDSHIP.**

Daniel, J. L.....Millwright.

**GALLATIN.**

Brown, W. H.....Machinery.  
 Nicholson, Jonas.....Iron Founder.  
 Reid, G. D.....Mfr. Plows.

**HUMBOLDT.**

Dodson, W. H.....Iron Founder.

**HUNNICUTT.**

Scott & Co.....Brass & Iron Founders.

**JACKSON.**

Branner & Myles.....Plumbers.  
 Curtiss, H. H.....Plumber.  
 Miles, Alexander.....Plumber.  
 Smith, J. C.....Founder & Machinist.

**JOHNSON CITY.**

Crumley & Miller.....Iron Founders.  
 Miller, G. W. & Sons.....Founders & Machinists.

**JONESBORO.**

Mason, A. G.....Iron Founder.  
 Osborne, J. M.....Millwright.  
 Rice, John.....Iron Founder.

**KINGSTON.**

Ferguson, J.....Brass & Iron Founder.  
 Hartley, W. J. & Co.....Brass & Iron Founders.

**KNOXVILLE.**

Butt, De Pue & Co.....Plumbers & Gas Fitters.  
 Clark Foundry & Mfg. Co.  
 Knoxville Car Wheel Co.  
 Knoxville Foundry & Machine Shop.  
 Knoxville Iron Co.  
 Kurth, C. & Co.....Plumbers.  
 Mead, H. G. & Co.....Machinists.  
 Nelson, H. O.....Ornamental Iron Works.  
 O'Brien, J. F.....East Tennessee, Virginia and Georgia R. R.  
 Rourke, M. P.....Plumber.

**LA GRANGE.**

Hatton & Anderson.....Iron Founders.

**LEE VALLEY.**

Harden, James.....Millwright.

**LENOIRS.**

Fisher, W. T.....Millwright.

**LOUISVILLE.**

Callahan, Amos.....Millwright.

**McKENZIE.**

Caldwell, J. W.....Brass & Iron Founder.

**McMINNVILLE.**

Faulkner, E. T. & J. J.....Iron Founders.

**MARTIN.**

Brasfield & Hendricks.....Machinery.

**MEMPHIS.****PLUMBERS, STEAM & GAS FITTERS.**

Ahern, M. C. McBride, J. M. & Co.  
 Bailey, Jos. A. Mallon, Philip J. & Co.  
 Browne, J. W. X. Massa, John.  
 Doyle, J. A. Moore & Purtell.  
 Fisher, J. A. Murgitroyde, John.  
 Gillespie & Callahan. Nelson, M. V.  
 Graham, D. R. Reinhardt, W. F.  
 Hitzfield, A. Jr. & Co. Shafer, A. H. & Co.  
 Lagomarsino, A. Tweedy, Geo. T.  
 Lunn, Wm.

**MISCELLANEOUS.**

Avery Gin Co.  
 Bicknell, B. J. & Co.....Machinery.  
 Carver Gin & Machine Co.  
 Frawley & Slagie.....Machinists.  
 Gunn & Fagan.....Iron Founders.  
 Kennesaw Mfg. Co.....Mfrs. Gins.  
 King, Josiah.....Mississippi & Tenn. Railroad.  
 Lawless, Peter.....Boiler Maker.  
 Lewis & Co.....Boiler Makers.  
 Livermore Foundry & Machine Co.  
 McDermott, W. J. & Co.....Machinists.  
 Monogue, John.....Iron & Steel.  
 Milburn Iron Works.  
 Moore & Crowson.....Mfrs. Cotton Gins.  
 Oates, J. C. & Co.....Machinery.  
 Payne, Geo. H. & Co.....Mfrs. Cotton Gins.  
 Pratt Gin Co.  
 Randle, John E. & Co.....Iron.  
 Risk, T. L. & Co.....Iron Founders.  
 Smiley, Smith & Co.....Mfrs. Gins.  
 Wessendorf & Eichberg.....Iron & Copper Works.

**MIDWAY.**

Lotspiech, N. A. & Co.....Iron Founders.

**MILAN.**

Hale, S. H.....Machinery.

**MURFREESBORO.**

Blanton, N. C.....Mfr. Plows.  
 Cross & Adams.....Engine Builders.

**NASHVILLE.**

Adams, R. F. & Co.....Iron.  
 Ca well, D. H.....Millwright.  
 Culbert, Wm.....Boiler Maker.  
 Cumberland Iron Works.  
 Dale, John P.....Machinery.  
 Drouillard Iron Co.  
 Dumont & Barner.....Machinery.

**NASHVILLE—Continued.**

Eastman, James V., Nashville Chattanooga & St. Louis Railroad.  
 Elder, James..... Machinist.  
 Gairns, Thomas..... Machinist.  
 Gray, Alexander..... Plumber.  
 Grewar, David..... Plumber.  
 Hailey, John G. & Co..... Iron Founders.  
 Hill, James..... Plumber.  
 Hillman, Buford & Corbett..... Iron.  
 Hughes, D. & Co..... Iron & Steel.  
 Jones, S. E. & Sons..... Iron Founders.  
 Legler, J..... Mfr. Fire Arms.  
 McCaslin, H..... Iron.  
 Miller, W. A. & Co..... Sheet Iron Works.  
 Morgan, John..... Plumber.  
 Mooney & Baine..... Plumbers.  
 Park, J. L..... Plumber.  
 Perine & Hitchcock..... Iron.  
 Perry, H. W..... Machinist.  
 Phillips, Buttorff Mfg. Co..... Stove Founders.  
 Reid & Foley..... Machinists.  
 Romans, J. B..... Founder & Machinist.  
 Ryan & Shea..... Plumbers.  
 Smith, Stratton, Gifford & Co..... Machinery.  
 Stewart & Bruckner..... Iron Founders.  
 Stewart & Son..... Ornamental Iron Works.  
 Warner Iron Co.  
 Water, W. L., & Son..... Iron Founders.  
 Webber, G. A..... Millwright.  
 Wood, B. G., & Co..... Iron Founders.  
 Wood & Simpson..... Boiler Makers.

**OAKDALE.**

Oakdale Iron Works.

**ONEIDA.**

McCullum &amp; Humason..... Stove Founders.

**PARIS.**

Paris Wagon &amp; Machine Shops.

**PEKIN.**

Dow, D. L..... Machinist.

**ROCKFORD.**

Callahan, Amos..... Millwright.

**ROCKWOOD.**

Roane Iron Mfg. Co.

**RUTHERFORD DEPOT.**

Smith, B. A..... Mfr. Fire Arms.

**SAULSBURY.**

Stewart &amp; Shive..... Mfrs. Plows.

**SAVANNAH.**

Duncan, D. C..... Machinist.

**SHELBYVILLE.**

Mansfield Machine Works.

**SHOUN'S CROSS ROADS.**

Brown, B. R..... Iron Works.

Potter, J. O..... Iron Works.

Rhea, R. C..... Iron Works.

**SNEEDSVILLE**

Harrison, G. W..... Machinery.

**SOUTH PITTSBURG.**

Lowman Bros..... Iron Founders.

**SPRING CITY.**

Phillips, E. T..... Tennessee &amp; Sequatchie R. R.

Rhea Iron Co..... Mfrs. Iron.

**SPRING HILL ACADEMY.**

Mitchell, J. J..... Millwright.

**TAZEWELL.**

Roop, Chas. W..... Millwright.

**TELFORD'S DEPOT.**

May, W. A..... Millwright.

Telford Mfg. Co..... Mfrs. Agri. Impl'ts.

**TRACY CITY.**

Brophy, Wm..... Iron Founder.  
 Knight, W. A..... Tennessee Coal, Iron & R. R. Co.

**TRENTON.**

Wells, J. J., &amp; Son..... Iron Founders.

**TREZEVANT.**

Fuqua, J. P., &amp; Son..... Iron Founders.

**UNION CITY.**

Cheatham, J. B..... Machinist.

Owenby &amp; Son..... Iron Founders.

**UNION DEPOT.**

Jenkins, J. L..... Iron Founder.

**WELLSPRING.**

McNew &amp; Maupin..... Iron Founders.

**WHITE BLUFFS.**

Jones, S. P., &amp; Co..... Millwrights.

**WITT'S FOUNDRY.**

Witt, C. H., &amp; Son..... Iron Founders.

**TEXAS.****AUSTIN.**

Bernsteil, Julius..... Brass and Iron Works.  
 Blumbritt, H..... Plumber and Gas Fitter.  
 Donschke, C..... Mfr. Agl. Implts.  
 Clark, L. P..... Iron Works.  
 Gerhard, P. H..... Machinery.  
 Gossard, A. R..... Machinery.  
 Jones & Glass..... Iron Founders.  
 Radkey, B..... Plumber.  
 Smith, Wm..... Plumber.  
 Struve, Geo..... Machinist.

**BIG SANDY.**

Wiggins &amp; Cardee Bros..... Machinery.

**BONHAM.**

Thornton, E. W..... Mfr. Pumps.

**BRAZORIA.**

Campbell, John..... Machinist.

**BRENHAM.**

Banks, C. G..... Machinist.

Peyton, C. S..... Machinist.

**BROWNSVILLE.**

Markwood, H..... Rio Grande R. R.

**CALVERT.**

Calvert Foundry and Manufacturing Co.

**CENTRALIA.**

Rice, J. F..... Machinist.

**CLEBURNE.**

Brown &amp; Wilson..... Machinery.

Gray &amp; Blair..... Machinery.

**COLUMBIA.**

Davis &amp; Sovereign..... Machinists.

**CORSICANA.**

Brooks, F. S. &amp; Co..... Machinists.

Keran, L. &amp; Son..... Machinists.

**CUERO.**

Mooney, Jas., Gulf, Western Texas &amp; Pacific R.R.,

**DALLAS.**

Avery, B. F. &amp; Sons..... Mfrs. Plow.

Doyle, E. F..... Plumber.

Duffy, William..... Iron Works.

Holmes, W. K..... Plumber and Gas Fitter.

Hosmer, C. E. &amp; Co..... Gas Fitters.

Morgan, Richard..... Iron Works.

Phelan &amp; Co..... Boiler Makers.

Russell &amp; Co..... Machinery.

Sinker, Davis &amp; Co..... Machinery.

Tompkins, R. V..... Machinery.

**DENTON.**

Clark, A. H. .... Machinery.  
Parker, W. S. .... Machinist.

**FORT WORTH.**

Garrepy & Smith. .... Iron Works.  
Havens, H. T. .... Machinery.

**FRELSBURG.**

Schröder, G. H. .... Machinist.

**GALVESTON.**

Astall, Jesse. .... Iron Founder.  
Bothman, C. .... Boiler Maker.  
Bowman, Chas. F. .... Mfr. Scale.  
Brockelman, Joseph. .... Sheet Iron Worker and Plumber.  
Clegg, E. P. & Co. .... Iron.  
Conlon, John G., Galveston, Houston & Henderson R. R.  
Davis, Jos A. .... Machinery.  
Galveston Iron Works Mfg. Co.  
Lee, C. B. & Co. .... Iron Founders.  
McCormack & Co. .... Gas Fitters.  
Mason, S. .... Mfr. Safes.  
May & Wainwright. .... Plumbers and Gas Fitters.  
Mills, James. .... Sheet Iron Worker.  
Nichols, Geo. B. .... Gulf, Colorado and Santa Fe Railway.  
Shean, Paul. .... Coppersmith and Gas Fitter.  
Taylor & Co. .... Brass Moulders.  
Walsh & Cleary. .... Machinists.  
Wicks, John W. .... Machinery.  
Wood, E. S. & Son. .... Iron.

**GEORGETOWN.**

Spencer, O. L. .... Machinery.

**GONZALES.**

Palmers & Richart. .... Machinists

**GROSBECK.**

Bislen, A. W. .... Machinery.

**HARRISBURG.**

Davis, D. T. .... Galveston, Harrisburg and San Antonio Railway.

**HALLETTSVILLE.**

Moreland, William. .... Machinery.

**HOUSTON.**

Bagby, Mrs. M. .... Iron Founder.  
Cushman, J. A., Jr. .... Machinist.  
Heitman, F. W. & Co. .... Iron.  
Liskow, Robert. .... Coppersmith.  
McGowen, Alex. .... Iron Founder.  
Mason, Black & Co. .... Mfrs. Plows.  
Meyer, J. F. .... Iron.  
Noble, L. C. .... Houston & Texas Central R. R.  
Openshaw, J. A. .... Houston, East & West Railway.  
Smith, D. C. .... Texas and New Orleans R. R.  
Wiggin & Simpson. .... Iron Works.

**HUNTSVILLE.**

Smith, J. Lyle. .... Iron Founder.

**JEFFERSON**

Kelley, G. A. .... Mfr. Agl. Impls.  
McKeown & Love. .... Iron Founders.

**KELLEYSVILLE.**

Kelly, G. A. .... Iron Founder.

**LONGVIEW.**

Pinkham & Stout. .... Iron Founders.

**MARSHALL.**

Marshall Foundry and Car Co.

**MELISSA.**

Miller, W. F. .... Machinist.

**MONTAGUE.**

Masterson, H. C. .... Machinist.

**MOSCOW.**

Safford, Henry H. .... Machinist.

**NEW BRAUNFELS.**

Gerlick, G. .... Machinist.

**OVERTON.**

Stell, T. H. & C. A. .... Iron Founders.

**PALESTINE.**

Dilley, Geo. M. & Son. .... Iron Founders.  
Johnson, R. H., International and Great Northern R. R.

**PARIS.**

Ownby & Richey. .... Machinists.  
Williams, L. H. & Co. .... Iron Founders.

**PITTSBURG.**

Smith, D. P. .... Machinist.

**ROCKPORT.**

Fulton, J. C. .... Machinist.

**SAN ANTONIO.**

Freeman, W. R. & Co. .... Plumbers.  
Holmgreen, Geo. .... Iron Founder.  
Nixon, R. G. .... Iron Founder.  
Outerside, W. H. & Co., Plumbers and Gas Fitters.

**SHERMAN.**

Cross, Jos. & Co. .... Machinists.  
Jouvenat, E. .... Iron Founder.  
Sherman Co-operative Foundry and Machine Co.  
Washington Iron Works.  
Wheat, Oslin & Co. .... Machinery.

**SULPHUR SPRINGS.**

Smith, W. W. .... Iron Founder.

**TEXARKANA.**

Kelly, E. & Co. .... Boiler Makers.  
McLane, Reed A. .... Machinery.  
State Line Machine Works.  
Wilkerson, Charles. .... Machinery.

**TYLER.**

Dilley Foundry and Machine Co.  
Jones & Blair. .... Iron Founders.  
Scheppert, John. .... Machinist.  
Smith, John A. .... Machinist.

**WACO**

Buck, G. J. .... Machinery.  
Canuteson, O. .... Iron Founder.  
Congar & Wilcox. .... Iron Founders.  
Hinchman, A. .... Machinery.  
Ripley & Journey. .... Machinery.  
Schroder & McGintz. .... Plumbers, Steam and Gas Fitters.  
Waco Rotary Plow Co.

**WILLIS.**

Sandel, J. M. & Bro. .... Mfrs. Agl. Impls.

**UTAH.****ALPINE CITY.**

Devey, W. & Son. .... Mfrs. Wrought Iron Goods.

**HILLSDALE.**

Assay, Wm. .... Machinist.

**HUNTSVILLE.**

Jorgenson, Hans. .... Machinist.

**LOGAN.**

Barber, Geo. .... Machinist.  
United Order Foundry & Machine Co.

**MORONI.**

Moroni Co-operative Threshing Machine Co.

**NORTH OGDEN.**

Blodget, N. .... Machinist.  
Ferrin, Jacob. .... Machinist.  
Williamson, C. C. .... Machinist.

**OGDEN.**

Brown, I. E.....Iron Founder.  
 Evans, D.....Plumber & Gas Fitter.  
 Kershaw, A. J.....Plumber & Pump Maker.  
 Lowe, Geo. A.....Machinist.  
 Ogden Iron Works.....  
 Stevens Bros.....Iron Founders.

**PAYSON CITY.**

Huish, Walter H. & Son.....Machinists.  
 McBeth, J. S.....Machinist.

**PINTO.**

Hanks, Ebenezer & Co.....Iron.

**RICHMOND.**

Griffin, Thomas.....Machinist.

**SALT LAKE CITY.**

Agramonte, C. H.....Machinist.  
 Armstrong, W. B.....Utah Central Railway.  
 Bowers, W. H. H.....Machinery.  
 Clawson, H. B.....Machinist.  
 Crowton & Co.....Plumbers.  
 Davis, Howe & Co.....Iron Founders.  
 Dunne, Daniel.....Iron Founder.  
 Haynes & Son.....Boiler Makers.  
 Heesch & Ellerbeck.....Gas Fitters.  
 James, David.....Plumber & Gas Fitter.  
 Lowe, George A.....Machinery.  
 Midgeley & Evans.....Plumbers.  
 Pierpont, T.....Iron Founder.  
 Reid, Geo. E.....Plumber.  
 Salt Lake Foundry & Machine Co.  
 Salt Lake Iron Works.  
 Schoppe, F. E.....Copper & Iron Works.  
 Silver, W. J.....Machinist & Founder.  
 Tuckfield, Thos.....Boiler Maker.  
 Utah Iron Mfg. Co.

**VERMONT.**

**ADDISON.**

Carpenter, M. A.....Mfr. Edge Tools.

**ARLINGTON.**

McLaughlin, Ira.....Machinist.  
 Phillips, Dewey.....Mfr. Edge Tools.  
 Warner, Clarendon.....Mfr. Files.

**BAKERSFIELD.**

Brigham, H.....Machinist.

**BARNET.**

Cook, A. B.....Machinist.  
 French, Chas. W.....Machinist.  
 Smith & Galbraith.....Mfrs. Agrl. Impls.  
 Worth, Timothy.....Machinist.

**BARRE.**

Cook, B. B.....Machinist.  
 Smith, Whitecomb & Co.....Iron Founders.  
 Whitecomb, L. W.....Machinist.

**BARTON.**

Buzzell, George W.....Millwright.  
 Murkland, John W.....Founder & Machinist.

**BELVIDERE.**

Potter, Thomas.....Machinist.

**BENNINGTON.**

Adams, Enos.....Mfr. Steam Engine Governors.  
 Fuller, Olney.....Millwright.  
 Holt, N. W.....Machinist.  
 Newton, W. D.....Plumber.  
 Putnam, H. W.....Mfr. Hardware.  
 Scott, H. W.....Millwright.  
 Scott, Olin.....Machinist.  
 Tiffany & Cooper.....Machinists.

**BERKSHIRE.**

Samson, Wm.....Mfr. Agl. Impls.

**BETHEL.**

Jackson, E. S.....Mfr. Edge Tools.  
 White River Iron Co.

**BRADFORD.**

Davis, H. D.....Machinist.  
 Wheeler, Levi F.....Founder & Machinist.  
 Winship & Co.....Iron, &c.

**BRANDON.**

Christie, John.....Stove Founder.  
 Luce, C. O.....Machinist.

**BRATTLEBOROUGH.**

Barrett, C. E.....Machinist.  
 Bickford Knitting Machine Mfg. Co.  
 Brattleborough Sewing Machine Co.  
 Burnham & Willis.....Brass Founders.  
 Curtis, F.....Machinist.  
 Earl, Edwin.....Iron.  
 Gould, William.....Plumber.  
 Gregg, A. R.....Iron Founder.  
 Higby Sewing Machine Co.  
 Rawson, H.....Machinist.  
 Wild, C. J.....Machinist.  
 White, Abner C.....Plumber.

**BRIGHTON.**

Noyes, W. Geo.....Machinist.

**BRISTOL.**

Bartlett, Stephen.....Iron Founder.  
 Fowle, John.....Machinist.

**BROOKFIELD.**

Guptil, E. T.....Mfr. Agrl. Impls.  
 Peck & Clark Mfg. Co.....Mfrs. Agrl. Impls.

**BROOKSVILLE.**

Brooks & Atwood.....Mfrs. Edge Tools.

**BRUNSWICK.**

Baldwin, E. A.....Machinist.

**BURLINGTON.**

Blodgett, G. S., & Co.....Stove Founders.  
 Brink & Co.....Iron Founders.  
 Brownell, F. G.....Burlington & Lamoille R. R.  
 Griffin, John.....Plumber.  
 Hunt, D. F., & Co.....Machinists.  
 Laneau, J. E.....Plumber.  
 Mills, P. D.....Plumber.  
 Nash & Wardlow.....Plumbers.  
 Nichols, B. S., & Co.....Machinists.  
 Payne, Edgar H.....Machinist.  
 Wheelock, T. A.....Gas & Steam Fitter.

**CANAAN.**

Stoddard, C. T.....Machinery.

**CASTLETON.**

Barrows, Frank A.....Mfr. Plows.

**CAVENDISH.**

Bailey, H. S.....Machinist.  
 Robbins, Otis.....Mfr. Agrl. Impls.

**CENTRE RUTLAND.**

Ruane, Edward.....Plumber.

**CHELSEA.**

Robinson, Cornelius.....Iron & Steel.

**CHESTER.**

Hayward, H. A.....Machinist.  
 Robbins & Marsh.....Iron, &c.

**DANVILLE.**

Burdick, J. B.....Mfr. Edge Tools.  
 Merrill, George & Son.....Machinists.  
 Randall, Asa.....Mfr. Threshing Machines.

**DERBY.**

Butterfield & Co.....Mfrs. Tools.  
 Fairchild, Truman.....Millwright.

**EAST ARLINGTON.**

McLaughlin, Ira.....Machinist.  
 Phillips, Dewey.....Machinery.

**EAST HIGHGATE.**

Rixford, Oscar S.....Mfr. Scythes.

**EAST JUNCTION.**

Truax, Jacob W.....Millwright.

**EAST MIDDLEBURY.**

Williams & Nichols.....Iron Founders.

**FAIRFAX.**

Butts, H.....Machinist.

**FAIRFIELD.**

Rooney, Patrick.....Machinist.

Soule, R. C.....Mfr. Agrl. Implts.

**FAIR HAVEN.**

Adams, J., & Sons.....Machinists.

Lewis, E. H.....Plumber.

**FAIRLEE.**

Porter, H. S.....Mfr. Edge Tools.

**GRANVILLE.**

Hemenway, N. & D.....Mfrs. Bolts.

**GREENSBORO.**

Hazen, O. L.....Machinist.

**GUILFORD.**

Jacob, H. W.....Mfr. Agrl. Implts.

Norcross, George.....Machinist.

Smith, S. A.....Machinist.

**HARDWICK.**

Knight, Chas. D.....Machinist.

**HARTFORD.**

French, Watson & Co.....Mfrs. Agrl. Implts.

**HARTLAND.**

English, N. F.....Machinist.

Gilbert, F.....Iron Founder.

**HIGHGATE.**

Hoskins & Hinerth.....Iron Founders.

Patrick, D. K.....Iron Founder.

**HYDEVILLE.**

Graves, B. F.....Iron Founder.

**IRASBURGH.**

Colton, J. D.....Machinist.

**JOHNSON.**

Bradley, Roswell.....Machinist.

Smith, L. J.....Mfr. Agrl. Implts.

Stearns, W. H.....Mfr. Agrl. Implts.

**LONDONDERRY.**

Garfield, E. S.....Mfr. Plows.

**LUDLOW.**

Patrick, William A.....Machinist.

Warner, J. P.....Machinist.

**LYNDON.**

Connecticut & Passumpsic R. R. Car Works.

Hopkins, Chas. H.....Machinist.

Miller, H. H.....Machinist.

**LYNDONVILLE.**

Brigham, L. L.....Mississippi Valley Railway.

**MIDDLEBURY.**

Langworthy, Henry.....Machinist.

Nichols & Williams.....Iron Founders.

**MIDDLETOWN.**

Granger, James.....Machinist.

Gray, Eugene W.....Founder & Machinist.

Gray's, A. W. Sons.....Mfrs. Agrl. Implts.

Haynes, H.....Machinist.

**MONTPELIER.**

Lane Mfg. Co.....Mfrs. Water Wheel Machinery.

Spear, J. C.....Gas Fitter.

Wright, M. dad & Son.....Mfrs. Planing Machines.

**MORRISTOWN.**

Morgan, H. H.....Iron Founder.

**MORRISVILLE.**

Morgan, H. H.....Mfr. Plows.

**NEWPORT.**

Brown, A. W. & Co.....Iron & Steel.

**NORTH DANVILLE.**

Randall, Asa.....Machinist.

**NORTH DORSET.**

Allen, F. R.....Iron Founder.

**NORTHFIELD.**

Ely Foundry Co.....Founders & Machinists.

Spaulding, A. F.....Machinist.

**NORTON.**

Cameron, D. H.....Millwright.

**PAWLET.**

Hulet & Bro.....Mfrs. Sheet Iron.

**PEACHAM.**

Bingham, J. W. & Co.....Mfrs. Agrl. Implts.

**PITTSFIELD.**

Pittsfield Iron & Steel Co.

White River Iron Co.

**PITTSFORD.**

Naylor & Co.....Iron Founders.

**POMPANOOSUC.**

Clogston, Henry.....Millwright.

**POULTNEY.**

Moseley & Stoddard Mfg. Co.....Mfrs. Hardware.

Ruggles, Henry.....Iron Founder.

**PUTNEY.**

Parker, S. O.....Mfr. Agrl. Implts.

**QUECHEE.**

Welch, James & Son.....Mfrs. Plows.

**RANDOLPH.**

Nutting, G. F.....Machinist.

Welsh, James.....Mfr. Agrl. Implts.

**RICHMOND.**

Barney, William.....Machinist.

**RICHVILLE.**

Newell, E. S.....Machinist.

**ROCHESTER.**

Worcester, Alonzo G.....Mfr. Plows.

**ROCKINGHAM.**

Armstrong, John T.....Plumber.

Burr & Son.....Millwrights.

Howard, L. G. & C. E.....Mfrs. Agrl. Implts.

Osgood, C. W.....Machinist.

Thompson, Derby & Co.....Mfrs. Agrl. Implts.

Vermont Farm Machine Co.

**ROXBURY.**

Hall, J. G. Mfg. Co.....Tools.

**ROYALTON.**

Howland & Yeaton.....Mfrs. Edge Tools.

Manchester, G. H.....Machinist.

**RUTLAND.**

Channell, Chas. E.....Plumber.

Harris, Joel B. & Son.....Iron Founders.

Harrison, H. F.....Mfr. Files.

Holmes Bros.....Boiler Makers.

Howe Scale Co.....Mfrs. Scales.

Lincoln Iron Works.

Mansfield & Stimson.....Founders & Machinists.

Patrick, Wm. A.....Machinist.

Rigby Combination Car Wheel Co.

Ross, Thomas.....Iron Founder.

Rutland Boiler Works.

Rutland Foundry & Machine Shop.

Rutland Nail Works.

Shortleaves, David.....Iron Founder.

Sullivan Machine Works.

Valiquette, Edward.....Plumber & Gas Fitter.

**RUTLAND (West).**

Graham, W. .... Machinist.  
Luggy, W. .... Machinist.

**SAINT ALBANS.**

Babbitt, W. E. .... Central Vermont R. R.  
Farrar Bros. .... Iron, &c.  
Green, E. G. .... Plumber.  
Prowse, G. .... Plumber.  
Saint Albans Foundry Co.  
Saint Albans Iron & Steel Works.  
Smith, W. C. .... Iron Founder.

**SAINT GEORGE.**

Tilly, H. H. .... Machinist.

**SAINT JOHNSBURY.**

Belknap, A. K. .... Mfr. Edge Tools.  
Belknap, Amos. .... Mfr. Edge Tools.  
Belknap, John. .... Mfr. Knife Blades.  
Bonett, Geo. W. .... Iron & Brass Founder.  
Butler, C. A. .... Mfr. Harrows.  
Ely Hoe & Fork Co.  
Fairbanks, E. T. & Co. .... Mfrs. Scales.  
Harriman, D. E. .... Iron Founder.  
Hooker, O. V. & Son. .... Machinists.  
Howe, Geo. E. .... St. Johnsbury & Lake Champlain R. R.  
Nutt, James. .... Mfr. Files.  
Rollins, Benjamin F. .... Mfr. Threshing Machines.  
Thompson & Goss. .... Machinists.  
Warner, James M. .... Machinist.  
Wheeler & Co. .... Iron Founders.  
Wheeler & Heyer. .... Machinists.  
Wilder, Wm. & Son. .... Iron, etc.

**SHARON.**

Flaunders, Moses P. .... Mfr. Agrl. Impls.  
Larkin & Varnum. .... Mfrs. Agrl. Impls.

**SHEFFIELD.**

Davis, Frank. .... Mfr. Agrl. Impls.

**SOUTH LONDONDERRY.**

Dudley, H. A. .... Mfr. Agrl. Impls.  
Whitman, A. D. .... Machinist.

**SPRINGFIELD.**

Anstin, H. K. .... Millwright.  
Gilman & Townsend. .... Machinists.  
Parks & Woolson Machine Co.  
Safford, D. F. .... Machinist.

**STARKSBOROUGH.**

Ferguson, D. .... Mfrs. Agrl. Impls.  
Orvis, John H. .... Mfr. Agrl. Impls.

**SUNDERLAND.**

Arlington Mfg. Co. .... Mfrs. Edge Tools.  
Bacon, M. V. B. .... Machinist.

**SWANTON.**

Moore, S. E. .... Machinist.

**TAFTSVILLE.**

Bixby, A. & Co. .... Iron Founders.  
Emerson Edge Tool Co.  
Hill & Osmore. .... Iron Founders.

**THETFORD.**

Tewsbury, William. .... Machinist.

**TROY.**

Eastman Machine Co.

**TUNBRIDGE.**

Hackett, Geo. H. .... Mfr. Agrl. Impls.  
Hall, John L. .... Mfr. Edge Tools.  
Smith, R. C. & C. B. .... Iron Founders.  
Swan & Brown. .... Mfrs. Agrl. Impls.

**UNDERHILL.**

Whitcomb & Day. .... Mfrs. Agrl. Impls.

**VERGENNES.**

National Horse Nail Co.  
Strong & Parker. .... Machinists.

**WALLINGFORD.**

Batchelder & Sons. .... Mfrs. Agrl. Impls.  
Miller, J. D. .... Mfr. Agrl. Impls.  
Simonds, L. .... Mfr. Agrl. Impls.

**WATERVILLE.**

Mann, G. H. .... Mfr. Edge Tools.

**WELLS.**

Lewis, E. F. .... Machinist.

**WEST FAIRLEE.**

Perkins, C. F. .... Mfr. Agrl. Impls.

**WEST RANDOLPH.**

Welch, J. & Son. .... Iron Founders.

**WHEELOCK.**

Cree, Stephen G. .... Machinist.

**WHITINGHAM.**

Ballou, Hosea B. .... Machinist.

**WILMINGTON.**

Crosier, L. F. .... Machinist.  
Dickinson, W. N. .... Sheet Iron Worker.  
Jordan, W. E. .... Mfr. Screws.

**WINDSOR.**

Amsden & Hall. .... Machinists.  
Harlow & Kilesey. .... Iron Founders.  
Jones & Lamson Machine Co.  
Lacy, Bros. & Co. .... Mfrs. Agrl. Impls.  
Wynn, R. D. .... Machinist.

**WINOOSKI.**

Edwards, Stevens & Co. .... Machinists.

**WOLCOTT.**

Wolcott Plow Co.

**WOODSTOCK.**

Daniels Machine Co.

**VIRGINIA.****ABINGDON.**

Clark, B. C. .... Iron Founder.

**ALBEMARLE.**

Harris, R. F. .... Mfr. Agrl. Impls.

**ALEXANDRIA.**

Cathcart, J. L. & Son. .... Machinists.  
Cogan, John A. .... Plumber.  
Cogan, Wm. .... Gas Fitter.  
Cuvillier, S. .... Plumber & Gas Fitter.  
Gorman & Pettit. .... Boiler Makers.  
Higgins, Joseph. .... Plumber & Gas Fitter.  
Jamison & Collins. .... Iron Founders.  
Leatherland, John. .... Iron Founder.  
Moore, Wm. S. & Sons. .... Machinists.  
Norris, J. E. .... Plumber & Gas Fitter.  
Potomac Mfg. Co. .... Mfrs. Iron.  
Stanton, J. D. .... Plumber & Gas Fitter.  
Waddy, J. E. .... Virginia Midland R. R.

**AYLETTS.**

Caldwell, J. S. .... Machinist.

**BALCONY FALLS.**

Jordan, W. H. .... Iron Founder.

**BELLEFONTE.**

Baker, G. A. .... Iron Founder.  
Hadder, C. .... Mfr. Plows.

**BEVERLY.**

Lipscombe & Somerville. .... Plumbers & Gas Fitters.  
Smith, R. W. .... Plumber & Gas Fitter.

**BIG LICK.**

Ferguson, J. B. .... Iron Founder.

**BIG SPRING DEPOT.**

Coffey, R. W. & Co. .... Machinists.

**BOYCEVILLE.**  
Paganhast, C. L.....Machinist.

**BRIDGEWATER.**  
Bridgewater Mfg. Co.....Iron Founders.

**BROADWAY DEPOT.**  
Broadway Mfg. Co.....Iron Founders.  
Lee, Edgar.....Machinery.

**BROWN HILL.**  
Pierce Bros.....Millwrights.

**BUCHANAN.**  
Hughins, Jas. & Bro.....Iron Founders.  
Snyder, H. C.....Millwright.

**BUFFALO LYTIA SPRINGS.**  
Pool, T. C. P.....Iron Founder.

**BUFFALO RIDGE SPRINGS.**  
Paxton, T. A.....Millwright.

**CAMP CREEK.**  
Wall, David.....Millwright.

**CAVE SPRING.**  
Martin, W. N.....Millwright.

**CHARLOTTESVILLE.**  
Harris, R. F.....Iron Founder.  
Williams, T. J.....Gas Fitter.

**CHATHAM.**  
Davis, W. G.....Millwright.  
Sours & Sons.....Iron Founders.

**CHRISTIANSBURG.**  
Zink, A. J. & Son.....Iron Founders.

**COLUMBIA FURNACE.**  
Wisler, John & Son.....Iron.

**CROCKETTS DEPOT.**  
Sawyers, R.....Stove Founder.

**CULPEPER.**  
Burgess, W. J.....Iron Founder.

**DANVILLE.**  
Boisseau & Flippin.....Iron Founders.  
Corbin & Westbrook.....Iron Founders.  
Crews & Westbrook.....Iron Founders.  
O'Donnell, J. J.....Plumber & Gas Fitter.

**ETNA MILLS.**  
Eubank, J. N.....Machinery.

**FARMVILLE.**  
Robeson, Geo. M.....Iron Founder.

**FLOYD.**  
Jett, J. T. & Son.....Iron Founders.

**FORT BLACKIMORE.**  
Carter, C. P.....Millwright.

**FREDERICKSBURG.**  
Bowering, B.....Iron Founder.  
Hunter, Chas. E.....Mfr. Plows.  
Revere, W. H.....Machinist.

**GAINES MILLS.**  
Han, Wm.....Machinist.

**GILMORES MILLS.**  
Watkins, John K.....Millwright.

**GOSHEN.**  
The Iron & Steel Works Association of Va.

**GRAHAM'S FORGE.**  
Graham & Robinson.....Mfrs. Iron & Nails.

**HAMILTON.**  
Lowell, J. P.....Iron Founder.  
Myers, C. F.....Machinist.

**HARRISONBURG.**  
Bradley, P.....Iron Founder.  
Earman, J. U.....Machinery.  
Sprinkle, J. G.....Machinist.

**HERNDON.**  
Taylor, J. W.....Millwright.

**HOWARDSVILLE.**  
Bateman, E.....Iron Founder.

**KAYSEYS.**  
Blunt, D. W.....Millwright.

**KERNSTOWN.**  
Chiles, John B.....Machinist.

**LEESBURG.**  
Cockey & Co.....Iron Founders.

**LEESVILLE.**  
Durham, L. S.....Millwright.

**LEXINGTON.**  
Ayres, A. G.....Millwright.  
Farrow, John.....Millwright.  
Mieks, F. M.....Millwright.  
Mullin, S. B.....Iron Founder.  
Smith, John M.....Iron Founder.

**LIBERTY MILLS.**  
Rouatt, A. P.....Mfr. Agrl. Impl'ts.

**LINCOLN.**  
Davis, Rodney.....Machinist.

**LITTLE PLYMOUTH.**  
McCue, J. J.....Iron Founder.

**LONGDALE.**  
Longdale Iron Co.

**LOW MOOR.**  
Low Moor Iron Co.

**LYNCHBURG.**  
Carter & Stevenson.....Iron Founders.  
Cleland, Jas. & Son.....Plumbers.  
Donovan, J. G.....Plumber.  
Edmonds, P. V.....Plumber.  
James River Steel Mfg. Co.  
Lynchburg Foundry & Machine Co.  
Lynchburg Iron Co.  
McNamara, J. W.....Gas Fitter.  
Moore, Geo. W.....Plumber.  
Mussur, W. B.....Machinist.

**MARION.**  
Curtain, Jones & Co.....Founders & Machinists.  
Look & Lincoln.....Mfrs. Agrl. Impl'ts.  
Luther & Goodell.....Iron Founders.  
Stone, A. F.....Millwright.

**MAX MEADOWS.**  
McGavock, Graham & Co.....Iron, &c.

**MIDDLEBURG.**  
Trenarg, John L.....Millwright.

**MIDDLETOWN.**  
Rhodes, Marshall.....Mfr. Plows.  
Kiddings, E. C.....Machinist.

**MILLWOOD.**  
Rogenhardt, B. J.....Machinist.

**MOOR'S STORE.**  
Armentrout, Nathaniel.....Machinist.

**MOUNT CRAWFORD.**  
Fifer, J. A.....Millwright.

**MOUNT JACKSON.**  
Triplett, J. I.....Iron Founder.

**MOUNT VERNON.**  
Flippin, J. T.....Millwright.



**MOUNT OF WILSON.**

Peirce, B. A. .... Millwright.

**NEW MARKET.**

Manor, C. E. .... Millwright.

**NEWS FERRY.**

Hawkins, J. D. .... Iron Founder.

**NORFOLK.**

Anderson, W. A. .... Iron Founder.

Baker, Joseph. .... Machinist.

Davis & Stephens. .... Plumbers.

Duvall, Geo. W., & Co. .... Iron Works.

Foster, W. E., & Co. .... Plumbers.

Godwin, Thos. W., & Co. .... Iron Works.

Guy, E. E. .... Plumber & Gas Fitter.

Hall, L. A., & Co. .... Copper-Smiths.

Howlett, Tatem & Cone. .... Iron Works.

Kerns, A. J. .... Mfr. Saws & Tools.

Lawler, Jos. J. .... Plumber.

Low, G. P. .... Elizabeth City & Norfolk R. R.

Lyons, A. J. .... Plumber.

Mayer, A. J. .... Machinists' Supplies.

Old Dominion Saw & Tool Co. ....

Pettit, Charles W. .... Iron Works.

Spaulding & Guy. .... Gas Fitters.

Withy, P. J. .... Machinist.

**OAK PARK.**

Marshall, U. D. .... Machinery.

**OLD TOWN.**

Reavis, Alexander. .... Iron Founder.

**PETERSBURG.**

Armstrong, Stur & Co. .... Iron Founders.

Brady, J. B. .... Gas Fitter.

Brooks & Parker. .... Plumbers & Gas Fitters.

Gillam, Thos. S. .... Iron & Steel.

Morrison, H. T., & Co. .... Iron Founders.

Petersburg Iron Works. ....

Plummer, E. H., & Co. .... Iron & Steel.

Sommers & Cogbill. .... Plumbers.

Tappey & Steel. .... Iron Founders.

Wright & Kidd. .... Plumbers.

**PORTSMOUTH.**

Clark, John F. .... Machinist.

Pendleton, M. M. .... Seaboard & Roanoke R. R.

Roach, W. E., & Son. .... Plumbers.

Union Car Works & Mfg. Co. ....

**PURCELLVILLE.**

Purcellville Mfg. Co. .... Mfrs. Agl. Impts.

**RADFORD.**

Culbertson, J. J. .... Iron, &c.

Radford Iron Co. .... Mfrs. Iron.

**RICHMOND.****IRON FOUNDERS.**

Anderson, Jas. R. .... Moore, Warner.

Bruce & Archer. .... Palmer, C. T.

Cook, William B. .... Talbott & Sons.

Hall, Joseph & Co. .... Tanner & Dulaney En-

Loth, W. J. .... gine Co.

**MACHINISTS.**

Crenshaw, J. B. .... Shockoe, Talbott & Sons.

Edmond, H. P. .... Turner, John.

Ettinger & Edmond. .... Waldron, W. A.

Rahn, A. J. .... Walker, Nathaniel S.

**PLUMBERS, STEAM AND GAS FITTERS.**

Arsell, Augustus. .... Hill & May.

Bargamin, G. & A. .... Manning, C.

Bargamin, Paul. .... May, A. H.

Collins, D. B. .... O'Donnell, D.

Hayes, James. .... Shanks & Barrett.

Hicky, M. J. .... Whitaker, J. L.

**MISCELLANEOUS.**

Atkins, B. J. .... Mfr. Iron.

Cardwell, J. W. & Co. .... Mfrs. Agl. Impts.

Cornick, Geo. C. .... Mfr. Iron.

Cox, W. L. .... Brass Founder.

Emmons, A. S. .... Chesapeake & Ohio R. R.

Gordon, James & Co. .... Iron & Steel.

**RICHMOND—Continued.**

Harris, G. D. .... Richmond & Allegheny R. R.

Henson & Rendler. .... Galvanized Iron Works.

Johnson, J. R. & Co. .... Mfrs. Car Axles.

Jones, Jas. .... Millwright.

Lindsay, J. L. .... Machinists' Supplies.

McFarland, Jno. .... Richmond & Danville R. R.

McIntyre, James & Co. .... Brass Founders.

Miller, A. J. & Co. .... Mfrs. Saws.

O'Brien's, D. M. Sons. .... Sheet Iron Works.

Old Dominion Iron & Nail Co. ....

Peyton, T. G. .... Machinists' Supplies.

Smith, Geo. A. .... Machinists' & R. R. Supplies.

Snyder, Asa. .... Galvanized Iron Works.

Starke's Dixie Plow Works. ....

Trainham, W. H. .... Richmond, Fredericksburg and

Potomac R. R.

Vials, E. P. .... Brass Founder.

Walsh & McLaughlin. .... Machinery.

Watt & Call. .... Mfrs. Agl. Impts.

**RIVERVILLE.**

Bessemer Iron Co.

**ROANOKE.**

Blackwell, C. .... Shenandoah Valley R. R.

Blocker, Geo. D. .... Plumber.

Coe, W. W. .... Norfolk & Western R. R.

Ferguson, J. B., & Co. .... Iron Founders.

Martin, W. N. .... Millwright.

**SALEM.**

Dinguld, Wm. .... Iron Founder.

Johnson Bros. .... Machinists.

McNamee, E. S., & Co. .... Iron Founders.

**SALISBURY FURNACE.**

Salisbury Iron Mfg. Co.

**SHENANDOAH IRON WORKS.**

Milnes, Wm. Jr. .... Iron Works.

**SHERANDO.**

Hyden, D. J. .... Millwright.

**SNOWVILLE.**

Abell, J. D. .... Mfr. Agl. Impl'ts.

**SOUTH BOSTON.**

Webster, Jas. A. .... Millwright.

**SPEEDWELL.**

Brawley & Landreth. .... Millwrights.

James, D. E. .... Mfr. Iron.

**STAUNTON.**

Bargamin, C. .... Plumber & Gas Fitter.

Burkholder & Armentrout. .... Mfrs. Agl. Impl'ts.

Lipcomb, J. S. .... Gas Fitter.

Lyle, Hugh F., & Co. .... Mfrs. Plows.

Lynn & Eyler. .... Machinists.

McKellver & Co. .... Founders & Machinists.

Smith, W. R. .... Gas Fitter.

Staunton Iron Works. ....

Trayer, Chas. H. .... Gas Fitter.

Weller & Root. .... Machinery.

**STEELE'S TAVERN.**

Lyle, Hugh F., & Co. .... Mfrs. Plows.

**STEVENSBURGH.**

Clark, R. L. .... Machinist.

**STRASBURG.**

Stover Machine Co.

**SUTHERLIN.**

Kerne, H. O. .... Mfr. Plows.

**SWOOPES DEPOT.**

Rife, W. A. .... Mfr. Hay Cutters.

Shoppert, G. A. .... Iron Founder.

**TAZEWELL.**

Peery, W. W. .... Iron Founder.

**TUNSTALL.**

Haw, John H. .... Machinist.

### UNIONVILLE.

Bell, William C. .... Mfr. Plows.

### VERDIERVILLE.

Bell, Wm. .... Mfr. Plows.

### VIENNA.

Welch, James. .... Iron Founder.  
Welch, Simeon. .... Iron Founder.

### WHITE POST.

Pargenhart, Chas. L. .... Machinist.

### WINCHESTER.

Gilbert, W. T. .... Iron Founder.  
Huddleston, R. H., & Co. .... Machinists.  
Maglis, Wm. .... Machinist.  
Nulton, J. A. .... Plumber.  
Rigby, Jos. .... Machinery.  
Snapp, Mrs. F. R. .... Iron Founder.  
Snapp, T. M. .... Machinist.

### WOODSTOCK.

Neeb & Nottel. .... Iron Founders.

### WYTHEVILLE.

Barrett, J. B., & Co. .... Iron Founders.  
McDonald, E. H. .... Machinist.  
McWane, H. E., & Co. .... Iron Founders.  
Sayers, Robert. .... Iron, &c.  
Vernon, H. .... Plumber.

### ZION'S MILLS.

Mitchell, Pennington & Co. .... Iron Founders, &c.

## WASHINGTON TERRITORY.

### DAYTON.

Pringle, Henry. .... Machinist.

### LA CONNOR.

Davis, J. E. .... Machinist.

### NEW TACOMA.

Lister, D., & Co. .... Iron Founders.

### OLYMPIA.

Allen, Baker & Co. .... Machinists.

### SEATTLE.

Foster, A. .... Boiler Maker.  
Loth, Harry. .... Machinist.  
Mar-h, Frank. .... Boiler Maker.  
Tenney & Fink. .... Founders.  
Williamson, J. R. .... Machinist.  
Williamson & Kellogg. .... Iron Founders.

### WALLA WALLA.

Bowman, F. M. .... Plumber.  
Kraft, Chas. F. .... Plumbers' Material.  
Marshall & Roberts. .... Iron Founders.

## WEST VIRGINIA.

### ANDERSON.

Howell, Clark. .... Hydraulic Machinery.  
Zink, W. H. .... Iron Founder.

### BENWOOD.

Benwood Iron Works. .... Mfrs. Nails & Spikes.  
Riverside Iron Works.

### BRAXTON.

Shetleworth, Thomas. .... Iron Founder.

### CENTREVILLE.

Sweeney, Daniel. .... Millwright.

### CHARLESTON.

Davis, Geo. .... Founder & Machinist.  
Thayer, O. A. & W. T. .... Iron Founders.  
Ward, Chas. .... Machinist.

### CHARLESTOWN.

Bishop, J. W. & Co. .... Machinery.  
Noland, J. H. .... Machinist.  
Werrick & Weller. .... Machinists.

### CLARKSBURG.

Hart, C. M. & J. B. .... Machinists.  
Osborn, J. F. Bro. & Co. .... Fdrs. and Machinists.  
Zinn, C. C. .... Machinery.

### CLIFTON.

Standard Nail & Iron Co.

### DUFFIELDS.

Hess, J. T. .... Mfr. Fire Arms.

### EASTON.

Weaver, J. F. .... Millwright.

### FAIRHILL.

Wiggenton, John J. .... Iron Founder.

### GRAFTON.

Carr, John. .... Iron Founder.

### HARTFORD CITY.

Klein, W. M. .... Coppersmith.

### HUNTINGTON.

Doyle, J. T. & Co. .... Machinist.  
Ensign Manufacturing Co. .... Mfrs. Cars.  
Jarvis Bros. .... Machinists.

### LEWISBURG.

Lipps, John & Son. .... Iron, etc.

### LITTLE SEWELL MOUNTAIN.

Hern, D. S. .... Millwright.

### MARTINSBURG.

Cline, Conrad. .... Machinist.  
Darby, Jas. B. .... Plumber.  
Farrin, John. .... Boiler Maker.  
Fisher & Fiske. .... Gas Fitters.  
Fitz, John. .... Iron Founder.

### MOOREFIELD.

Hutter, G. & Sons. .... Coppersmiths.

### MORGANTOWN.

Reay, G. M. .... Iron Founder.

### MOUNDSVILLE.

Seusenseny, C. H. .... Mfr. Mowing Machines.  
The Andrew Kloman Steel & Iron Co.  
West Virginia Agricultural Works.

### NEW CUMBERLAND.

Miller, J. O. .... Iron Founder.  
Wylie, Andrew. .... Machinist.

### NEW MARTINSVILLE.

Bucher, F. C. .... Millwright.

### NEWTON.

Ryan, W. H. .... Iron Founder.

### PALATINE.

Marion Machine Works.

### PARKERSBURG.

Cole Bros. .... Machinists.  
Crichton, G. W. .... Machinist.  
Despard & Co. .... Iron Founders.  
Devol, J. L. .... Iron & Brass Founder.  
Kelly, Michael. .... Iron Founder.  
Kraft & Upson. .... Machinists.  
Murphy, Thos. .... Coppersmith.  
Smith, John J. .... Boiler Maker.  
Star Foundry Co.  
Turner, Chas. H. .... Gas & Steam Fitter.

### POINT PLEASANT.

Point Pleasant Machine Co.

### QUINNIMONT.

Quinnimont Iron Foundry.

**ROMNEY.**

Shockey, Geo. W.....Machinist.

**RONCEVERTE.**Bloomer & Co.....Founders & Machinists.  
Ronceverte Foundry Co.**SECOND CREEK.**

Humphrey, James.....Millwright.

**SPENCER.**

Vance, C. G.....Machinist.

**STAAT'S MILLS.**

Powers, E.....Millwright.

**TUNNELTON.**

Brown, John W.....Iron Founder.

**VULCANO.**Anderson, D. L.....Machinist.  
Hardy, James.....Machinist.  
Smith, J. H.....Machinist.  
Smith, John J.....Boiler Maker.  
Whitman, C. & H.....Machinists.**WEBSTER.**

Smith &amp; Bartlett.....Mfrs. Agl. Impts.

**WEBSTER, C. H.**

Elbon, Jas. E.....Millwright.

**WELLSBURG.**Blakensop, John & Bro.....Iron Founders.  
Everett, Bracken & Co., Mfrs. Reapers & Mowers.  
Redman & Co.....Machinists.  
Sweeney, A. J. & Son.....Engine Builders.**WESTON.**Dancer, Geo. C.....Iron Founder.  
Shaw, S. J.....Millwright.**WHEELING.**Bandi, Nicholas.....Mfr. Files.  
Beck & Adams.....Brass Founders.  
Beck & Simpson.....Plumbers.  
Bell, Joseph & Co.....Iron Founders.  
Belmont Nail Co.....Mfrs. Nails.  
Benwood Iron Works.  
Burt, W. T. & Co.....Iron, &c.  
Cady, D. & Son.....Boiler Makers.  
Caldwell, B. F.....Sheet Iron, &c.  
Centre Foundry Co.  
Collins & Reed.....Brass Founders.  
Cox & Jack.....Boiler Makers.  
Cox & Morrison.....Boiler Makers.  
Fisher, Benj. & Son.....Stove Founders.  
Fitton, Luke.....Plumber.  
Harden & Williams.....Iron, &c.  
Hare, Wm. & Son.....Plumbers.  
Jones, Herald & Co.....Mfrs. Tacks, &c.  
Junction Iron Co.  
Kuglen, Samuel.....Coppersmith.  
La Belle Iron Works.  
Laughlin Nail Co.....Mfrs. Nails.  
Loving, J. A. & Son.....Boiler Makers.  
Manufacturers' Iron Co.  
Norway Tack Co.....Mfrs. Tacks.  
Redman & Co.....Machinists.  
Riverside Iron Works.  
Roney, John A.....Plumber.  
Seeley, O.....Plumber.  
Snyder, Jacob.....Iron, &c.  
Standard Iron Co.  
Sweeney, A. H. & Son.....Founders & Machinists.  
Thompson & Hibberd.....Gas Fitters.  
Trimble & Lutz.....Gas Fitters.  
Vance & Moorhead.....Boiler Makers.  
Wheeling Iron & Nail Co.  
Whittaler Iron Co.**WILLOW ISLAND.**

Sibert, G. W.....Machinist.

**WISCONSIN.****AHNAPEE.**

Detzer &amp; Bro.....Machinists.

**APPLETON.**Angus, John J.....Machinist.  
Appleton Mfg. Co.....Mfrs. Agl. Impts.  
Barker, J. M.....Millwright.  
Champion Steel Horse Nail Co.  
Morgan & Bassett.....Iron Founders.  
O'Keefe, Thos. & Son.....Millwrights.  
Procter, Weltuier & Co.....Iron Founders.  
Thien, Anton.....Plumber.  
Thien & Nicholls.....Plumbers.  
Vatter, Geo.....Gas Fitter.**ARGYLE.**Gaskill, S. S.....Millwright.  
Wyman & Withers.....Mfrs. Plows.**BANGOR.**

Jenkins, John.....Machinist.

**BARABOO.**Savage, Harper F.....Machinist.  
Wackler, W. F.....Machinist.**BEAVER DAM.**Ordway, A. F. & Son.....Millwrights.  
Rowell, J. S. Sons & Co.....Mfrs. Agl. Impts.**BELMONT.**

Hamby &amp; Martin.....Machinery.

**BELOIT.**Aldrich, W. H.....Machinist.  
Doud, R. J.....Machinist.  
Gasten, N. B. & Son.....Iron Founders.  
Gesley Bros.....Mfrs. Agl. Impts.  
Hansen, C.....Mfr. Plows.  
Henderson Bros.....Iron Founders.  
Merrill, O. E. & Co.....Machinists.  
Merrill & Houston.....Iron Works.  
Olmstead, O. B.....Iron Founder.  
Prouty, E.....Mfr. Presses.  
Summers, G. H.....Machinist.  
Thompson, J. & Son.....Mfrs. Plows.**BERLIN.**Boyle, R.....Mfr. Plows.  
Davis, Pugh & Co.....Iron Founders.  
Johnson, Niels.....Machinist.**BLACK RIVER FALLS.**

Hussey &amp; Co.....Founders &amp; Machinists.

**BLOOMINGTON.**Messmore & Merrill.....Iron Founders.  
Taylor & Son.....Iron Founders.**BOSCOBEL.**Obleiter, M.....Mfr. Plows.  
Richardson, J. C.....Machinist.  
Thompson & Cowan.....Machinists.**BRIGGSVILLE.**

Gray, E. C.....Millwright.

**BRODHEAD.**Brodhead Mfg. Co.....Mfrs. Agl. Impts.  
Carpenter, E. B.....Iron Founder.**BURLINGTON.**Corey, J. H.....Millwright.  
Wagner, Hubert.....Founder & Machinist.  
Zwiebel, A.....Machinist.**CAMBRIA.**Jones, R. C. O.....Machinery.  
Roberts, W. W.....Machinist.**CASSVILLE.**

Draacke, August.....Machinist.

**CEDARSBURG.**

Embring, Wm.....Iron Founder.

**CENTRALIA.**

Bremer, Wm.....Machinist.  
Patrick & Mahoney.....Machinists.

**CHILTON.**

Geise, L. D.....Machinist.  
Janke, L. & Co.....Iron Founders.  
Stendel & Goessling.....Mfrs. Plows.  
Voldick, A.....Mfr. Agl. Impts.

**CHIPPEWA FALLS.**

Henneman, F.....Machinery.  
Nichols, Adams & Co.....Plumbers.  
Swift, N. O.....Gas Fitter.

**CLINTONVILLE.**

Cook, W. H.....Machinist & Founder.

**COLOMA.**

Richmond, E. D.....Machinery.

**COLUMBUS.**

Vaugh, S. S.....Machinist.

**COMMONWEALTH.**

Commonwealth Iron Co.

**DARLINGTON.**

Kummer, M.....Machinist.

**DE FOREST.**

Knutesen, K.....Machinist.

**DELTON.**

Adams, C. H.....Iron Founder.

**DE PERE.**

McVey, Chas. & Bro.....Mfrs. Plows.  
Novelty Mfg. Co.....Mfrs. Mill Machinery.  
West De Pere Agricultural Works.

**DODGEVILLE.**

Hearn, A. S.....Plumber.  
Stratman, F. W. & Co.....Machinists.

**DURAND.**

Wallace & Hammond.....Machinery.

**EAST TROY.**

Dickerman, Harry.....Machinist.

**EAU CLAIRE.**

Deshon, Charles A.....Plumber & Gas Fitter.  
Fox, J. P.....Plumber.  
Gaston Bros.....Boiler Makers.  
Lalley, P.....Boiler Maker.  
McDonough, Frank.....Saw Mill Machinery.  
Phoenix Mfg. Co.....Iron Founders.  
Shaw, N. & Co.....Iron Founders.

**ELKHORN.**

Barnes, W. A.....Machinist.  
McKaig Bros.....Machinists.

**ERIN.**

Powers, T. R.....Plumber & Gas Fitter.

**EVANSVILLE.**

Baker Manufacturing Co.....Iron Founders.

**FAIR WATER.**

Drummond, Alex.....Machinist.

**FLORENCE.**

Spring, C. & Co.....Mfrs. Iron.

**FOND-DU-LAC.**

Allis, E. P. & Co.....Iron Founders.  
De Groat, Giddings & Lewis.....Iron Works.  
Fond-du-Lac Harrow Co.  
Fond-du-Lac Machine & Foundry Works.  
Kalpitz, Frank.....Brass Founder.  
McDonald Mfg. Co.....Mfrs. Threshers.  
Maxim & Son.....Mfrs. Saws.  
Meyer, Chas. J. L.....Machinist.  
Pierce, C. L.....Mfr. Plows.  
Bidgeway, Joseph.....Mfr. Files.

**FOND-DU-LAC—Continued.**

Scherer, Henry.....Mfr. Files.  
Sterling Machine Co.  
Taylor, A. B.....Plumber.  
Wheel & Seeder Co.....Mfrs. Agl. Impts.

**FORT ATKINSON.**

Pounder, Geo. H.....Iron Founder.

**FORT HOWARD.**

Brehme, Austin.....Boiler Maker.  
Burns, David.....Machinery.  
Duncan, John.....Iron Founder.  
O'Leary Bros.....Boiler Makers.  
Spencer, H. F.....Machinist.

**FOSCORO.**

Osell, Isaac.....Millwright.

**FOUNTAIN CITY.**

Clark, John.....Machinist.

**FOX LAKE.**

Porter, Crane & Co.....Iron Founders.

**FREDONIA.**

Korman & Taplin.....Founders & Machinists.

**GENEVA.**

Haskins, John.....Mfr. Reapers & Mowers.  
Montague, G.....Millwright.

**GENOA JUNCTION.**

Udell, S. C.....Machinery.

**GEORGETOWN.**

Eplett, John.....Millwright.

**GRAND RAPIDS.**

Long, Alfred E.....Millwright.  
Patrick & Mahony.....Founders & Machinists.

**GREEN BAY.**

East River Foundry.  
Emirgh, J. D.....Gas Fitter.  
Poener, Moses.....Machinist.  
Silber, Robert.....Iron Founder.

**HARTFORD.**

Rowell & Co.....Iron Founders.

**HORICON.**

Van Brunt, D. C.....Mfr. Agl. Impts.

**HUDSON.**

Hartley, R., Sr.....Iron Founder.  
Hudson Mfg. Co.....Mfrs. Threshers.

**HUILSBURG.**

Uber, A.....Iron Founder.

**INDEPENDENCE.**

Horst, F.....Machinist.  
Raetz, C. A.....Machinist.

**IOLA.**

Du Fur, A. H.....Millwright.

**IRON MOUNTAIN.**

Wisconsin Iron Co.

**JANESVILLE.**

Doty Agricultural Implement Mfg. Co.  
Empire Cross Spring Co.  
Harris Mfg. Co.....Iron Founders.  
Janesville Machine Co.  
Libby, Geo. A.....Gas Fitter.  
Pearson, F. T.....Plumber.  
Pritchard, G. & Co.....Plumbers.  
Single Centre Carriage Spring Co.  
Strunk, D.....Machinist.  
Ward, D. C.....Millwright.  
Watson, Wm.....Gas Fitter.  
Yeomans, R. C.....Steam Fitter.

**JEFFERSON.**

Vaughan, O. C.....Founder & Machinist.

**KENOSHA.**

Elk Rapids Iron Co. .... Machinists.  
Tectonius & Bashaw .....  
Whittaker Engine & Skein Co. ....  
Williams, Henry ..... Mfr. Agl. Impls.

**KEWASKUM.**

Renmell Bros. & Co. .... Machinists.

**KEWAUNEE.**

Hamacek, Frank. .... Founder & Machinist.

**KILBOURN CITY.**

Marshall, G. M. & Son. .... Founders & Machinists.

**KNAPP.**

Bailey Mfg. Co. .... Mfrs. Agl. Impls.

**LA CROSSE.**

Davidson, P. S. .... Machinist.  
Funk, M. .... Boiler Maker.  
Hirshheimer, A. .... Mfr. Plows.  
James, John & Co. .... Founders & Machinists.  
Norton & Keeler ..... Mfrs. Agl. Impls.  
Pierce, S. B. .... Machinist.  
Powers, W. P. .... Plumber & Gas Fitter.  
Rosevelt, W. A. .... Gas Fitter.  
Smith & Merrill. .... Iron Founders.  
Thornley, & Ott. .... Iron Works.  
Torrance, John & Son. .... Iron Founders.

**LADOGA.**

Sherwin, E. C. .... Mfr. Agl. Impls.

**LAKE MILLS.**

Hurd, Geo. W. .... Machinist.  
Millard, Delos. .... Iron Founder.  
Seaver, F. A. & Son. .... Mfrs. Knives.  
Williams, G. A. .... Mfr. Agl. Impls.

**LANCASTER.**

Hyde, Geo. .... Machinist.

**LEDYARD.**

Cassad, C. D. .... Machinist.

**LODI.**

Ayer, H. M. .... Machinery.  
Chisler, J. & Co. .... Mfrs. Plows.

**LONE ROCK.**

Holcomb, A. L. .... Mfr. Plows.  
Ochsner, Bros. .... Mill Machinery.

**MADISON.**

Arnold, C. E. .... Gas Fitter.  
Askew, W. .... Gas Fitter.  
Ball & Bros. .... Machinists.  
Champion Foundry. ....  
Detloft, F. .... Machinist.  
Fleming, James J. .... Machinist.  
Fuller & Johnson Mfg. Co. .... Mfrs. Plows.  
Madison Mfg. Co. .... Iron Founders.  
Madison Plow Co. ....  
Melaney, John. .... Plumber.  
Regan, Thomas. .... Gas Fitter.  
Schmidt, Chas. .... Machinist.  
Walker & Co. .... Mfrs. Printing Presses.

**MAGNOLIA.**

Whitney, J. R. .... Mfr. Plows.

**MANITOWOC.**

Dumpke, A. F. & A. C. .... Founders & Machinists.  
Hickey, J., Milwaukee, Lake Shore & Western  
Railway. ....  
Martin & Willott. .... Mfrs. Edge Tools.  
Prochazka, A. & Co. .... Machinists.  
Richards, H. C. .... Iron Works.  
Siebert, W. C. .... Boiler Maker.  
Smalley Mfg. Co. .... Iron Founders.  
Willott, J. & Son. .... Mfrs. Axes.

**MARINETTE.**

Marinette Iron Works Co. .... Fdrs. & Machinists.

**MAUSTON.**

Carter, B. M. .... Founder & Machinist.  
Mauston Plow Works. ....

**MAYVILLE.**

Boehmer, H. & Co. .... Iron Founders.  
Pernot, Pierre. .... Machinist.

**MAZOMANIE.**

Kirch, Nicholas. .... Iron Founder.

**MEDFORD.**

Sell, George & Co. .... Machinery.

**MENASHA.**

Burts, H. A. .... Millwright.  
Howard & Jennings. .... Founders & Machinists.  
Little, Jas. & Son. .... Iron Founders.  
Stridde, Wm. .... Mfr. Flows.

**MERRILLON.**

Clarks & Son. .... Founders & Machinists.

**MILLSTON.**

Newberry, L. M. .... Machinist.

**MILTON.**

Burdick, D. C. .... Machinist.  
Davis, Evans. .... Machinist.

**MILWAUKEE.****IRON FOUNDERS.**

Albert, Geo. A. .... 390 6th.  
Allis, E. P. & Co. .... S. E. cor. Clinton & Florida.  
Bayley, Wm. .... 81 to 87 Chicago.  
Brand & Co. .... 295 to 303 6th.  
Campbell, Gardiner & Son. .... 242 to 246 Oregon.  
Dorsch, L. .... 267 Reed.  
Dutcher, Vose & Co. .... 269 E. Water.  
Filer, Stowell & Co. .... N. W. cor. Florida & Clinton.  
Greenslade Bros. .... Cor. Juneau & Jackson.  
Hubbell Stove Co. .... 35 W. Water.  
Jewett, S. S. & Co. .... 283 E. Water.  
May, Swallow & Co. .... N. W. cor. 4th & Fowler.  
Schwab & Sercomb. .... 277 Clinton.  
Sheriffs, James. .... Cor. Barclay & S. Water.  
Wagner, J. G. .... 518 Market.  
Weisel & Vilter. .... 70 Chicago.

**MACHINISTS.**

Albert, Geo. A. .... 390 6th.  
Allis, E. P. & Co. .... S. E. cor. Clinton & Florida.  
Bastram, Alex. .... 423 4th.  
Borgniss, E. E. .... 314 State.  
Corbett, T. M. & Co. .... 135 Ferry.  
Friedrich, Jos. .... 816 Winnebago.  
Gutenkunst, Wm. .... 263 Reed.  
Johnson, Wm. .... 135 Michigan.  
Kiefer, I. F. .... 273 W. Water.  
Koehler, E. .... 45 Oneida.  
Ludwig, P. .... 267 W. Water.  
Sedmihradsky, A. .... 487 12th.  
Smith, Chas. J. & Son. .... 134 2nd.  
Toepfer, Wenzel & Son. .... 86 Menomonee.  
Zehner, C. A. .... 669 3rd.

**PLUMBERS, STEAM AND GAS FITTERS.**

Apel, H. C. .... 202 Reed.  
Baker, J. C. .... 320 Grand Av.  
Ferriter, P. .... 59 Division.  
Finn, R. J. .... 128 Mason.  
Freduenfeld, H. J. .... 595 E. Water.  
Gilbreath, Thos. .... 126 Mason.  
Goodman, W. E. .... 442 E. Water.  
Lyon, E. T. .... 142 Mason.  
Masino, John T. .... 559 E. Water.  
Murphy, P. H. .... 372 Milwaukee.  
Plum, Lewis H. .... 459 Milwaukee.  
Polatschek, Chas. .... 510 Chestnut.  
Roegler, M. .... 516 Chestnut.  
Sloterman & Kruse. .... 385 Broadway.  
Sohns, H. .... 471 E. Water.  
Stevens, J. C. .... 422 Milwaukee.  
Weber, G. .... 107 Detroit.  
Winkler, Jacob. .... 369 3rd.  
Wittig, J. & F. .... 485 E. Water.

**MISCELLANEOUS.**

Allen, Wm., Brass Founder. .... 168 Clinton.  
Bebb, Thos. & Co., Brass Founders. .... 170 W. Water.  
Biersach & Neidermeyer, Galvanized Iron. .... 107  
Oneida.  
Birge & Smith, Millwrights. .... 659 E. Water.

**MILWAUKEE—Continued.**

Cockle Separator Mfg. Co.,	Mfrs. Agl. Impts.
N. W. cor. Clinton & Florida.	
Costello, D., Boiler Maker	1010 Fowler.
Davis, Richard, Boiler Maker	212 Oregon.
Duval, C. F., Mfr. Threshing Machines	128 Clybourne.
Elmore, R. P. & Co., Iron, &c.	400 E. Water.
Eviston, J. W., Boiler Maker	216 Broadway.
Felthousen, B. W., Gas Fittings	192 E. Water.
Hoffmann, Billings & Co., Brass Founders	141 W. Water.
Jones, R. L., Galvanized Iron	51 3rd.
Jungblut, John, Mfr. Tools	124 Second.
Keepers & Riddell, Iron Wks. cor. Fowler & 17th.	
Kirby, A. R., Mfr. Saws	277 Lake.
Koestler, X., Mfr. Safes	277 W. Water.
Lamp, Peter, Brass Founder	225 Cedar.
Leist, Hugo, Brass Founder	154 Clinton.
Losfelholz & Co., Brass Founders	170 Clinton.
Milwaukee Galvanized Iron Works	Cor. Fowler & Seventeenth.
North Chicago Rolling Mill Co.	37 Mitchell Bldg.
North-Western Iron Co.	406 Milwaukee.
Packard, O. L., Machinery	87 W. Water.
Pennell, W. N., Mfr. Safes	335 E. Water.
Phoenix Scale Co.	318 State.
Pietsch, Herman, Coppersmith	273 W. Water.
Pritzlaff, John, Iron, &c.	41 W. Water.
Richter, F., Brass Founder	516 Chestnut.
Rundle, Spence & Co., Steam Fitters' Supplies,	89 W. Water.
Scheffel, F., Mfr. Edge Tools	225 Wells.
Schmitt, F., & Son	Galvanized Iron Works, 407 Chestnut.
Smith Bros., Millwrights	454 Canal.
Spring Lake Iron Co.	406 Milwaukee.
Stock, Charles, Coppersmith	51 Knapp.
Stumpf, J., Mfr. Saws	110 Clybourne.
Suelfohn & Seefeld, Iron	75 W. Water.
Thompson & Nathanson, Mfrs. Tools	62 Third.
Westphal, F. & Co., Mfr. Files	279 W. Water.
Whitehill Mfg. Co.	Mfrs. Sewing Machines. 230 W. Water.
Whittemore, D. J., Chicago, Milwaukee & St. Paul R. R.	
Wilkinson, F. M., Boiler Maker	32 Oregon.
Wisconsin Malleable Iron Co.	Bay View Av.
Yale, H. P. & Co., Machinery	99 W. Water.

**MINERAL POINT.**

Lanyon, J., & Bros.	Iron Founders.
Wearney, John, & Son	Iron Founders.
Wosley & Charles	Machinery.

**MONDOVI.**

Ecker, I. H.	Machinist.
Fisher, N. K.	Machinist.
Myers, E. H.	Machinist.

**MONROE.**

Monroe Mfg. Co.	Iron Founders.
Zilmer, W.	Machinist.

**NEENAH.**

Aylward, Wm.	Iron Founder.
Bergstrom, C.	Mfr. Plows.
Bergstrom Bros. & Co.	Stove Founders.
Jamieson, Robert	Machinist.
Johnson, John	Millwright.

**NEILLSVILLE.**

Gallaber, L. W.	Machinist.
Gleeson, F. A.	Iron Founder.
Korman & Chaplin	Iron Founders.

**NESHKORA.**

Scobie, Andrew, & Co.	Iron Founders.
-----------------------	----------------

**NEW LONDON.**

Beasley, C.	Machinist.
Mead, T. D.	Iron Founder.

**NORTH CAPE.**

Svenson, S.	Machinist.
-------------	------------

**NORTH HUDSON.**

Orme, H.	Iron Founder.
----------	---------------

**OCONOMOWOC.**

Mackus, Gus.	Iron Founder.
Rowell, I., & Sons	Iron Founders.

**OCONTO.**

Holbach, A.	Iron Founder.
-------------	---------------

**OMRO.**

Challoner, F. & J.	Machinists.
--------------------	-------------

**ONTARIO.**

Fuller, William	Machinist.
-----------------	------------

**OSHKOSH.**

Avery, C. H.	Machinist.
Battio, Martin T.	Boiler Maker.
Boyd, J. F.	Brass Founder.
Burns, Alexander	Boiler Maker.
Morse, J. F.	Iron Founder.
Paige, C. C.	Founder and Machinist.
Ransom, Perry	Machinist.
Sutton & Barnes	Machinists.
Swift, H. H.	Machinist.
Tilton, E. W.	Mfr. Saws.
Ward, J. H.	Mfr. Plows.
Wyman, G. D.	Mfr. Plows.

**PALMYRA.**

Raon, C. F.	Iron Founder.
-------------	---------------

**PEPIN.**

Fuller, Hiram, Jr.	Machinist.
--------------------	------------

**PESHIGO.**

Lister, S. G.	Iron Founder.
---------------	---------------

**PINE RIVER.**

Allen, M.	Millwright.
-----------	-------------

**PLAINFIELD.**

Kretzer, J. L.	Machinist.
----------------	------------

**PLATTEVILLE.**

Reebe, H.	Machinist.
Gratiot & Sons.	Mfrs. Agl. Impts.
Jones, Samuel M.	Mfr. Plows.
McCabe, J. W.	Machinist.
Potter & Jones	Mfrs. Plows.
Record & Son	Machinists.
Richard, Bros.	Machinists.
Snowdon, R.	Iron Founder.

**PLOVER.**

Bourn, A. H. & Bros.	Iron Founders.
----------------------	----------------

**PLUM CITY.**

Doughty, E. M.	Millwright.
----------------	-------------

**PLYMOUTH.**

Schwartz, C.	Iron Founder.
--------------	---------------

**PORTAGE CITY.**

Fyfe, James	Iron Works.
-------------	-------------

**PORT WASHINGTON.**

Gilson, Theo. & Son	Iron Founders.
Lyman, H. W. & Co.	Iron Founders.
Martin & Webster	Iron Founders.
Western Malleable Iron Works	

**POYNETTE.**

Stanton, H. C.	Machinist.
----------------	------------

**PRAIRIE-DU-CHIEN.**

Benson, Chas. E.	Mfr. Plows.
Harris & Ben-on	Mfrs. Plows.
Resier, Christian	Machinist.

**PRAIRIE-DU-SAC.**

Failing, A. B.	Machinist.
----------------	------------

**PRINCETON.**

Junker, J & J.	Iron Founders.
----------------	----------------

**RACINE.**

Abels & Bennett	Mfrs. Springs.
Blow, John	Plumber.
Breary & Adams	Iron Founders.
Case, J. I. Plow Co.	Mfrs. Plows.
Davis, C.	Plumber.
Dickey & Fessie	Iron Founders.
Freeman, Stephen & Son	Boiler Makers.

**RACINE—Continued.**

Gunther, Henry & Son.....Machinists.  
Herrick, C. B. & Co.....Mfrs. Threshing Machines.  
Hewett, C. B.....Mfr. Well Augers.  
Jensen, J.....Iron Works.  
Racine Hardware Mfg. Co.  
Racine Duplicating Chilled Plow Co.

**RED RIVER.**

Longstaff, O. C.....Millwright.

**REEDSBURG.**

Thompson, W. F.....Millwright.

**RIO.**

Palmer, Gideon.....Iron Founder.

**RIPON.**

Hitchcock, J.....Mfr. Agl. Impts.  
Lawson, Emery.....Iron Founder.  
Schaefer, William E.....Iron Founder.

**RIVER FALLS.**

Young, Bros.....Machinists.

**SAUK CITY.**

Kahn, Andrew.....Machinist.

**SCHLEISINGERVILLE.**

Rosche, C.....Iron Founder.

**SCHOFIELD.**

Graves, S. E.....Millwright.

**SECHLERVILLE.**

Van Gordon, S. H.....Machinery.

**SEYMOUR.**

Kratzkee, W. & Co.....Mfrs. Plows.

**SHEBOYGAN.**

Blocki, F.....Machinist.  
Bode, L.....Mfr. Knitting Machines.  
Brechtel, Wm.....Gas Fitter.  
Feebe, Henry & Co.....Founders and Machinists.  
Jenkins, David.....Machinery.  
Kohler, Haynes & Stehn.....Mfrs. Cast Steel.  
Vollrath, J. J.....Iron Founder.

**SHEBOYGAN FALLS.**

Demand & Huyck.....Iron Founders.  
Sanford, B. E.....Iron Founder.

**SHERMAN.**

Hellminger, Chas.....Iron Founder.

**SPARTA.**

Newbury, L. M.....Iron Founder.  
Stimpson, O. J.....Machinery.

**SPRING GREEN.**

Reese, F. G.....Machinist.

**STAR PRAIRIE.**

Millard Bros.....Iron Founders.

**STEVENS POINT.**

Cook, R. A. & Co.....Iron Founders.  
Covil, W. L.....Machinist.  
Ellinwood, D. J.....Machinist.  
Long, Alfred C.....Millwright.  
Luce, J. R.....Machinist.  
Rice, J. & Bro.....Iron Founders.  
Seyler, Daniel.....Iron Works.  
Weston, W. & Son.....Machinists.

**STOUGHTON.**

Erickson, K.....Mfr. Plows.  
Larson, C.....Mfr. Plows.  
Mandt, T. G.....Mfr. Plows.

**STURGEON BAY.**

Ives, Wm. A. & Son.....Iron Founders.

**SUAMICO.**

Codington, L.....Millwright.

**TABOR.**

Kloepe, Peter.....Mfr. Rivets.

**TOMAH.**

Durham, B. F.....Machinist.  
Wilson, James.....Mfr. Plows.

**TREMPEALEAU.**

Barrett, J. M.....Machinery.  
Kleese, J. G.....Machinist.

**WALWORTH.**

Bedell, Chas.....Machinist.

**WATERFORD.**

Cook, S. H.....Mfr. Plows.  
Hoffer & Vose.....Mfrs. Plows.

**WATERLOO.**

Newton & Slater.....Iron Founders

**WATERTOWN.**

Bennett, Jos. B.....Iron Founder.  
Dornfield, J. F.....Millwright.

**WAUKESHA.**

Blair, Wm.....Iron Founder.  
Blair, F. C.....Machinist.  
Hartwell, C. S.....Machinist.

**WAUPACA.**

Dana, Dunbar & Co.....Iron Founders.  
Rosche, John.....Iron Founder.

**WAUPUN.**

Dahl, M. K.....Mfr. Plows.  
Jones, W. M.....Iron Founder.

**WAUSAU.**

Adams, James.....Mfr. Saws.  
Franzel, J. A.....Founder & Machinist.  
Murray, D. J.....Iron Founder.

**WEST BEND.**

Silberzahn & Young.....Iron Founders.

**WEST DE PERE.**

Atkinson, John.....Iron Founder.  
Fox River Iron Co.  
Jackson, Thos.....Machinist.  
Willard, J. R. & Co.....Iron Founders.

**WEYAUWEGA.**

Whitney, C. A.....Iron Founder.

**WHITE CREEK.**

Hammond, J. D.....Millwright.  
Wilson, J. W.....Millwright.

**WHITEWATER.**

Ballard, A. W.....Machinist.  
Esterly, Geo. & Son.....Mfrs. Agl. Impts.  
Hall, W. C.....Plumber & Gas Fitter.  
Martin, W. T.....Machinist.  
Ostrander, S. B.....Machinist.  
Vandewater, J. & Son.....Machinists.  
Winchester & Partridge Mfg. Co.....Mfrs. Plows.

**WINCHESTER.**

Anmenson, K.....Machinist.

**WYOCENA.**

Bridge, E. J.....Millwright.

**WYOMING.**

**LARAMIE CITY.**

Cordiner, William.....Machinist.  
Union Pacific R. R. Co.....Union Pacific Rolling Mills.

# CANADA.

## ONTARIO.

### AILSA CRAIG.

Alexander Bros.....Iron Founders.

### ALEXANDRIA.

Charlebois, Auguste.....Iron Founder.  
Miller, Campbell & Charlebois.....Iron Founders.

### ALLENDALE.

Butterfield, J. S.....Iron Founders.

### ALLISTON.

Knight & Wilson.....Iron Founders.

### ALMONTE.

Young, Bros.....Iron Founders.

### ALTON.

Dick, Alexander.....Iron Founder.

### AMHERSTBURG.

Amherstburg Foundry & Machine Works.  
Middleditch, Geo.....Iron Founder.

### ANCASTER.

Egleston, Edgar F.....Iron Founder.

### ARKONA.

Mellow & McPhee.....Mfrs. Agl. Impl'ts.

### ARNPRIOR.

Bolton, Geo.....Plumber.  
McEwan, John.....Iron Founder.

### ARTHUR.

Busholen, John.....Iron Founder.  
Greenwood, Wm.....Iron Founder.  
Nimmo, Thos.....Iron Founder.

### ASHBURNHAM.

Forsythe, W.....Machinery.  
Mowry, R.....Iron Founder.

### AUGHRIM.

McKay, J. B.....Plowmaker.

### AURORA.

Fleury, J. M., (Estate of).....Iron Founder.  
Wilkinson, Geo. & Co.....Iron Founders.

### AVENING.

Trenaman & Clement.....Iron Founders.

### AYLMER.

Mann, Wm. H.....Iron Founder.

### AYR.

Watson, J.....Iron Founder.

### BADEN.

Livingston, J. & J.....Iron Founders.

### BANDON.

Mellville, Andrew.....Millwright.

### BARRIE.

Butterfield, L.....Iron Founder.  
Sewry, Henry.....Iron Founder & Boiler Maker.

### BATH.

Forward, David T.....Iron Founder.

### BEAMSVILLE.

Brandt, James J.....Iron Founder.  
Houssen, Israel.....Mfr. Bells.  
Weirs, Daniel.....Mfr. Bells.

### BEAVERTON.

Beaverton Foundry & Agl. Works.  
Smith, Wm. & Co.....Iron Founders.

### BELLEVILLE.

Brown, G. & J.....Iron Founders.  
Burrill, Ellis, (Estate of).....Mfrs. Axes.  
Linklater, Thos.....Plumber.  
Malcolm, W.....Plumber.  
Martin Bros.....Iron Founders & Machinists.  
Rankinson & Stevens.....Iron Founders.

### BERLIN.

Nelson & Co.....Iron Founders.  
Woelffle, J. J.....Mfr. Plows.

### BLENHEIM.

Hall Bros.....Iron Founders.  
Nichol, John & Co.....Iron Founders.

### BLYTH.

Duncan, Wm.....Iron Founder.

### BOLTON.

Dick, Wm.....Iron Founder & Machinist.  
Plummer, John P.....Iron Founder.

### BOND HEAD.

Nelson, W. & T.....Iron Founders.

### BOTHWELL.

Robinson, Jno.....Iron Founder.

### BOWMANVILLE.

Porter, William & Son.....Iron Founders.  
Prouth, Mark.....Millwright.

### BRADFORD.

Coates & Son.....Iron Founders.  
McGillvey & Stevenson.....Iron Founders.

### BRAMPTON.

Haggart Bros. Mfg. Co.....Iron Founders.  
Martin, E.....Machinist.  
Phoenix Iron Foundry.

### BRANTFORD.

Buck, Wm.....Iron Founder.  
Cockshutt, Jas. G.....Mfr. Plows.  
Cowherd & Son.....Coppersmiths.  
Harris, A. Son & Co.....Machinists.  
Matterson, W. H.....Plumber.  
Petrie, H. W.....Machinist.  
Russell, Robert.....Plumber.  
Sayles & Ramsey.....Machinists.  
Tisdale, B. G. & Son.....Iron Founders.  
Waterous Engine Works Co.  
Wisner, J. O., Son & Co.....Mfrs. Agl. Impl'ts.

### BREWER'S MILLS.

Brewer, James.....Millwright.

### BRIDGEWATER.

Jackson, David.....Millwright.

### BRACKVILLE.

Baker, Thos.....Plumber.

### BROCKVILLE.

Black, Bros.....Boiler Makers.  
Cole, W. H.....Mfr. Stoves.  
Cossitt, G. & Bro.....Iron Founders.  
Howe, Wm.....Gas Fitter.  
Mellor, C.....Plumber.  
Richards, B. W.....Mfr. Bolts & Rivets.  
Smart & Shepherd.....Machinists.

### BRUSSELS.

Ronald, J. D.....Iron Founder.  
Wilson, W. R.....Iron Founder.

### BURLINGTON.

Baynes, J. H.....Millwright.

### BYNG INLET.

Armstrong, Geo.....Mfr. Files.  
Manson, John.....Mfr. Files.  
Ramsbottom, John.....Mfr. Files.  
Smith, Chas.....Mfr. Files.  
Vanhorn, Chas.....Mfr. Files.

### CAINTOWN.

Quinsey, Ed.....Millwright.

### CALEDON EAST.

Raine, Nicholas.....Iron Founder.

### CALEDONIA.

Scott, John & Co.....Iron Founders.  
Walker, Robt. Sr.....Iron Founder.



**CAMDEN EAST.**

Burgoyne, James.....Millwright.

**CAMPBELLFORD.**Dixon, John.....Iron Founder.  
Whyte, J. & Co.....Iron Founders.**CANNINGTON**

McLaughlin, John.....Iron Founder.

**CANTON.**

Jones, Joseph.....Millwright.

**CARLETON PLACE.**Findley, D.....Iron Founder.  
Graham, Blyer & Co.....Iron Founders & Machinists.**CARLSRUHE.**

Wangler, Joseph.....Mfr. Plows.

**CARTWRIGHT.**

Morrison, Jno.....Millwright.

**CAYUGA.**

Evans, Joseph.....Iron Founder.

**CEDAR DALE.**

Whiting, A. S. Mfg. Co.....Agl. Impits.

**CHATHAM.**Bennett, John & Sons.....Mfrs. Plows.  
Davis, John.....Iron Founder.  
Fleming, Everett & McLeod.....Iron Founders.  
Groves, Thos.....Iron Founder.  
McPhilemy H. & Son.....Boiler Makers.  
Parke David & Sons.....Machinists.  
Parkinson, Robt.....Machinist.**CHATSWORTH.**

McGill, Andrew.....Iron Founder.

**CHESLEY.**Elliott, Wm.....Iron Founder.  
Pilgrim, Wm.....Machinist.**CHISHOLM'S RAPIDS.**

Bunce, Ed.....Iron Founder.

**CLAREMONT.**

Ward, Robt. W.....Iron Founder.

**CLIFFORD.**

Harrison, T.....Iron Founder.

**CLINTON.**Downs, R.....Machinist.  
Glasgow, McPherson & Co.....Iron Founders.**COBOURG.**Clark, James.....Cobourg, Peterboro' & Marmora Ry.  
Crossan, James.....Iron Founder.  
Munson, A. E.....Machinist.  
Payne, W. L.....Iron Founder.**COLBORNE.**

Scripture, C. J. &amp; Bro.....Iron Founders.

**COLLINGWOOD.**Cameron & Moberly Foundry.  
Holman, Watts & Co.....Boiler Makers.**COMBER.**

Chatterton, H. A.....Millwright.

**COPELESTON.**

Draper, T.....Machinist.

**CORNWALL.**Gillie & Morrisette.....Iron Founders.  
Loney, J. E.....Iron Founder.**CRESSY.**

Wright, Sandford.....Boiler Maker.

**DELHI.**

Wemmer, John.....Iron Founder.

**DELTA.**

Hicock, Albert.....Iron Founder.

**DRESDEN.**Clapp, W. H. & Son.....Iron Founders.  
Trerice, A.....Iron Founder.**DRUMBO.**

Buckborough, Wm.....Iron Founder.

**DUBLIN.**Bruxer Bros.....Iron Founders.  
McNevin, Jno.....Millwright.**DUNDAS.**Dundas Edge Tool Co.  
Dundas Iron Foundry.  
Dundas Tool Works.  
Kennedy, Thos.....Boiler Maker.  
May & McFarlane.....Iron Founders.  
McKechnie & Bertram.....Mfrs. Edge Tools.  
Stamford, J. L.....Plumber.  
Wilson, R. T.....Mfr. Axes.  
Wilson, Thomas.....Iron Founder.**DUNNVILLE.**Bell, Jno. & Son.....Iron Founders.  
Taylor, John.....Iron and Steel.  
Yocom, Calvin.....Mfr. Plows.**DURHAM.**

Cochrane, Alex.....Iron Founder.

**EGANVILLE.**

Devlin, Thos.....Iron Founder.

**EGMONDVILLE.**

Budd, Wm.....Machinist.

**ELMIRA.**

Johnson, Peter.....Mfr. Plows.

**ELORA.**Elora Agricultural Machine Mfg. Co.  
Filehie, Archibald.....Iron Founder.  
Gladstone, James.....Iron Founder.**EMBRO.**

McKinnon, Dan.....Iron Founder.

**ERIN.**Blackwood & McDonald.....Iron Founders.  
Walker, C. H.....Iron Founder.**ESSEX CENTRE.**

Irwin, James.....Iron Founder.

**EUGENIA.**Hopps, Jno.....Millwright.  
Purdy, Robt. McLean.....Millwright.**EXETER.**

Verity, W. H.....Iron Founder.

**FALL BROOK.**

Wallace, Alex.....Millwright.

**FENELON FALLS.**Gage, David.....Millwright.  
Pinch, Jno. S.....Millwright.  
Robson & Allen.....Iron Founders.**FERGUS.**Beatty, Bros.....Iron Founders.  
Grindley & Son.....Machinists.  
Johnston, Thomas.....Plumber.**FINGAL.**

McPherson, Glasgow &amp; Co.....Iron Founders.

**FOREST.**

Wren, A. &amp; Co.....Iron Founders and Machinists.

**FORT WILLIAM.**

Smith, S.....Machinist.

**FREDERICKSBURG.**Meredith, Henry.....Iron Founder.  
Wimmer, Frank.....Iron Founder.**FRENCH'S MILLS.**

Langdon, Geo.....Iron Founder.

**GALT.**

Cant, Gourlay & Co.....Machinists.  
 Cant, Laidlaw & Co.....Machinists.  
 Cowan & Co.....Iron Founders.  
 Galt Edge Tool and Spring Co.  
 Goldie & McCulloch.....Iron Founders.  
 Hay & Patterson.....Mfrs. Knives.  
 McDougall, R. & Co.....Iron and Brass Founders.  
 Shurly & Dietrich.....Mfrs. Saws.  
 Warnock, Jos. & Co.....Mfrs. Edge Tools.

**GANANOQUE.**

Abbott, E. E.....Iron Founder and Machinist.  
 Gananoque Spring Co.  
 Gillies, George.....Mfr. Agl. Impls.  
 Jones, D. F. & Co.....Mfrs. Agl. Impls.  
 Matthews, W. G.....Mfr. Springs.  
 Parmenter & Bullock.....Mfrs. Rivets.

**GARDEN ISLAND.**

Gray, Thomas.....Boiler Maker.

**GEORGETOWN.**

Bradley, James.....Millwright.  
 King, R. W.....Iron Founder.

**GLENCOE.**

Aldred, Frederick.....Machinist.

**GODERICH.**

Crystal & Black.....Boiler Makers.  
 Goderich Boiler Works.  
 Saunders, James.....Mfr. Ranges and Stoves.  
 Seegmiller & Co.....Mfrs. Plows.

**GORRIE.**

Turner, Robt.....Iron Founder.

**GRAFTON.**

Rooney, Jno.....Iron Founder.

**GRAVENHURST.**

Love, Lambert.....Iron Founder.  
 Mowry & Sons.....Iron Founders.  
 Saunders, Wm.....Millwright.

**GRIMSBY.**

Grout, Jno. H. & Co.....Iron Founders.

**GUELPH.**

Crowe, Jno.....Iron Founder.  
 Peek, Geo.....Gas Fitter.  
 Gowdy, Thos. & Co.....Mfrs. Agl. Impls.  
 Griffin & Grundy.....Iron Founders.  
 Inglis & Hunter.....Iron Founders.  
 Mills, W. H.....Iron Founder.  
 Murchy, A. & Co.....Iron Founders.  
 Murphy, J. W.....Plumber.  
 O'Connor, Wm.....Mfr. Agl. Impls.  
 Robertson, A. & Sons.....Iron Founders.  
 Worswick, Thos. & Co.....Machinists.

**HAGERSVILLE.**

Smith & Winger.....Iron Founders.

**HAMILTON.****MACHINISTS.**

Bassett, H. D. Holman, Jno.  
 Bell, Geo. M. James, C.  
 Copp, Bros. & Barry. Kay, Thos. L.  
 Gardner Sewing Mach. Co. Kelly, J. H. & Co.  
 Co. Leitch & Turnbull.  
 Geiss, Wm. Marskell, Geo.  
 Gurney, E. & C. & Co. Meakin, Harry.  
 Guss, Wm. Peters, Rudolph.  
 Hennessey, Hugh. Reid & Barr.  
 Hinchliffe, R. Wilson & Co.

**PLUMBERS, STEAM AND GAS FITTERS.**  
 Adams, James. Harding, Henry.  
 Ballantine, T. McPhie, Donald & Co.  
 Barber, Geo. A. Sharp, David.  
 Clark & Squibb. Watson, Jno.  
 Fairley, Stewart & Co. Young & Bro.  
 Farmer, Wm.

**HAMILTON—Continued.****MISCELLANEOUS.**

American Nail Works.  
 Blakeslee & Walsh.....Brass Founders.  
 Brayley & Dempster.....Mfrs. Hardware.  
 Broadbent, T & G.....Brass Founders.  
 Burrow, Stewart & Milne.....Mfrs. Malleable Iron.  
 Central Iron Works.  
 Chadwick, Jno. H.....Zinc Works.  
 Copp, Bros.....Iron Founders.  
 Copp, Bros. & Co.....Mfrs. Plows.  
 Dodson, J. R.....Brass Founder.  
 Forster, A. M.....Brass Founder.  
 Gartshore, Alex.....Iron Founder.  
 Gurney, E. & C. & Co.....Iron Founders.  
 Gurney & Ware.....Mfrs. Scales.  
 Hamilton Agl. Works.  
 Hamilton Bridge & Tool Co.  
 Hamilton Iron Forging Co.  
 Hinchliffe, R.....Iron Founder.  
 Howse, Matthew.....Mfr. Stoves.  
 Hunter, Wm.....Brass Founder.  
 Kelly, J. H. & Co.....Boiler Makers.  
 Laidlaw, Bowers & Co.....Stove Founders.  
 Moore Samuel J.....Mfr. Edge Tools.  
 Moore, Robinson & Co.....Iron Founders.  
 Morrison, G. C.....Boiler Maker.  
 Olmstead & Son.....Iron Founders.  
 Ontario Rolling Mill Co.  
 Reid & Barr.....Iron Founders.  
 Robbins, N. B.....Mfr. Grates.  
 Star Well Auger Co.  
 Stewart, James & Co.....Iron Founders.

**HANOVER.**

Lockie, James.....Millwright.  
 Meyers & Son.....Iron Founders.

**HARRISTON.**

Lambert & Strong.....Iron Founders.  
 Stong, Geo.....Iron Founder.  
 Teeple, S.....Iron Founder.

**HAYDON.**

Motley, Wm.....Millwright.

**HESPELER.**

Jarden, A. B. & Sons.....Machinists.  
 Karch, C. & H.....Iron Founders.

**HORNBY.**

Downes, W.....Iron Founder.

**HUMBERSTONE.**

Neff & Misener.....Iron Founders.

**INGERSOLL.**

Brander, Jas.....Iron Founders & Machinists.  
 Brown, Thos. & Co.....Iron Founders.  
 Buchanan, Jno. & Son.....Plumbers.  
 Forster, Geo.....Iron Founder.  
 Henderson, T.....Machinist.  
 McSherry, Geo.....Iron Founder.  
 Noxon, Bros. Mnfgr.....Machinists.  
 Sutton, John.....Iron Founder.

**IRENA.**

Lamour, David.....Machinist.

**IROQUOIS.**

Lavamour, David.....Mfr. Threshing Machines.

**JARVIS.**

Yocum, Chas. W.....Iron Founder.

**KEENE.**

Prautt, R.....Millwright.

**KEMPTVILLE.**

Johnson, Thomas.....Iron Founder.  
 Lamping, L. & Son.....Iron Founders.  
 Murphy, John.....Millwright.

**KENCARDINE.**

Fisher, Ira J. & Co.....Iron Founders.

**KINGSTON.**

Baston, J. G. .... Plumber.  
 Calvin & Son ..... Iron Founders.  
 Canadian Locomotive & Engine Co.  
 Chown & Cunningham ..... Mfrs. Stoves.  
 Cockburn, Jno. .... Plumber.  
 Davidson, Doran & Co. .... Iron Founders.  
 Dunn, Wm. .... Plumber.  
 Jamieson, Jas. .... Plumber.  
 Kingston Charcoal & Iron Co.  
 Kingston Foundry Co.  
 McEwen, D. & Son ..... Machinists.  
 McKelvey & Birch ..... Plumbers.  
 McNeil, Neil ..... Plumber.  
 Spencer, Levi B. .... Mfr. Locks.  
 Taylor, I. .... Kingston & Pembroke Railway.

**KINGSVILLE.**

Harris, Owen ..... Iron Founder.

**LAKEFIELD.**

Dinwoodie, John ..... Millwright.  
 Wood, James ..... Millwright.

**LAMBTON MILLS.**

Atkinson, Jacob C. .... Iron Founder.

**LANARK.**

Dobbie, A. G. .... Iron Founder.

**LANCASTER.**

Stafford, Wm. .... Machinist.

**LEAMINGTON.**

Pizer, W. R. .... Iron Founder.  
 Stubbing, Wm. A. .... Iron Founder.

**LINDSAY.**

Makine, John ..... Iron Founder.  
 Mowry, B. R. & Co. .... Iron Founders.

**LISLE.**

Turpe, John ..... Millwright.

**LISTOWELL.**

Austin, A. & Co. .... Iron Founders.

**LITTLE BRITAIN.**

Mark, Edwin ..... Iron Founder.  
 Peacock, Joseph ..... Iron Founder.

**LONDON.**

Brown, Thomas ..... Boiler Maker.  
 Childs, Joseph A. .... Iron Founder.  
 Curtis, F. .... Mfr. Screws.  
 Darvill, David ..... Iron Founder.  
 Davis, W. H. .... Plumber & Gas Fitter.  
 Deon, W. .... Coppersmith.  
 Elliott, John & Son ..... Iron Founders.  
 Essex, Dunn & Co. .... Brass Founders.  
 Fleming, John ..... Mfr. Axes.  
 Fox, John ..... Mfr. Scales.  
 Globe Works Co. .... Iron Founders.  
 Graham, S. B. .... Machinist.  
 Hall, Joseph, Mfg. Co. .... Agt. Impts.  
 Heard & Greenaway ..... Plumbers.  
 Hobbe, W. C. .... Machinist & Brass Founder.  
 Law, John ..... Brass Founder & Plumber.  
 Leigh, R. .... Plumber.  
 Leonard, Elijah & Son, Engine Builders & Boiler Makers.  
 London Car Wheel Co.  
 London Scale Works.  
 Lothian, J. W. .... Plumber.  
 McClary Mfg. Co. .... Iron Founders.  
 McLennan & Fryer ..... Plumbers.  
 McPhie, D. & Co. .... Plumbers.  
 Miller, Malloch & Carries ..... Iron Founders.  
 Ontario Car & Foundry Co.  
 Rogers, E. & Co. .... Steam & Gas Fitters.  
 Rowland, Dennis ..... Iron Works.  
 Saunders, S. & Co. .... Plumbers.  
 Shafer, O. F. .... Machinist.  
 Stevens, Turner & Burns Mfg. Co. Brass Founders.  
 Wand, John ..... Machinist.  
 White, George ..... Machinist.  
 Winnett, Ed. .... Boiler Maker.  
 Winnett & Sons ..... Boiler Makers.  
 Yates, Wm. .... Machinist.

**LOWVILLE.**

Moose, Fred ..... Iron Founder.

**LUCAN.**

Donovan, Wm. .... Iron Founder.  
 Jackson, John ..... Iron Founder.  
 McLean, Wm. J. .... Iron Founder.

**LUNENBURG.**

Wood, John R. .... Brass Founder.

**LYN.**

McNish, Geo. P. .... Iron Founder.  
 Widdis, Robert ..... Millwright.

**LYNDHURST.**

Roddick, James ..... Millwright.

**LYNEDOSH.**

Plewis, J. W. .... Millwright.  
 Wimmer, J. .... Iron Founder.

**MADOC.**

Bethlehem Iron Co.  
 White, John ..... Iron Founder.

**MAITLAND.**

Lemon, Charles ..... Iron Founder.  
 Wilburn, John ..... Millwright.

**MANITOWANING.**

Purdy, John ..... Millwright.

**MANOTICK.**

Latimer, James B. .... Millwright.

**MARKDALE.**

Moffatt Bros. .... Iron Founders.

**MARKHAM.**

Flcury, Alexander ..... Iron Founder.  
 Gee, Peter & Son ..... Bell Founders.  
 Hewit, Robert ..... Machinist.

**MEDFORD.**

Barber, Chas. .... Iron Founder & Machinist.  
 Brush, Geo. .... Engine Builder.  
 Farrar, C. A. .... Machinist.  
 Watt, Chas. .... Iron Founder.

**MERRICKVILLE.**

Dangerfield, W. .... Mfr. Rakes.  
 Kyle, P. .... Malleable Iron Works.  
 McGee & Pearson ..... Iron Founders.  
 Merrick & Miller ..... Malleable Iron Works.

**MERITTON.**

Dunn, Wilson & Co. .... Iron Founders.  
 Phelps, J. & P. .... Mfrs. Hammers.  
 Wilson, James ..... Iron Founder.

**MILDMAY.**

Powers, Andrew ..... Iron Founder.

**MILLBANK.**

Kohlman, Jacob ..... Iron Founder.  
 Millbank Agt. Works.

**MILLBROOK.**

Russell, W. G. .... Machinist.

**MILL TOWN.**

Pegan, Robt. F. .... Iron Founder.

**MILTON.**

Brothers, Joseph ..... Iron Founder.  
 Brown, Edwin ..... Iron Founder.  
 John-on & Aikens ..... Iron Founders.

**MITCHELL.**

Clegg, Wm. .... Machinist.  
 Hill, Alexander & Co. .... Iron Founders.  
 Mulheron, Alex. & Co. .... Iron Founder.

**MORPETH.**

Longman, Thos. J. .... Iron Founder.

**MORRISBURGH.**

Barry, W. N. .... Millwright.  
Dane, Alonzo ..... Iron Founder.  
Miller, J. F. & Son. .... Iron Founders.  
Morrisburgh Agl. Impt. Works.  
Nash, R. G. .... Machinist.

**MOUNT ALBERT.**

Gibney & Son ..... Iron Founders.

**MOUNT ELGIN.**

Boyer, Geo. H. .... Machinist.

**MOUNT FOREST.**

Kilgour, Robt. & Sons. .... Iron Founders.  
Stovel, H. H. .... Iron Founder.

**MOUNT PLEASANT.**

Best, Isaiah ..... Iron Founder.

**MONROE'S MILLS.**

Carlyle, Thos. .... Millwright.

**NAIRN.**

Marsh, Hammond. .... Mfr. Files.

**NAPANEE.**

Herring, Jno. & Sons. .... Iron Founders.  
Mair, G. L. .... Machinist.  
Pringle & Daley. .... Iron Founders & Machinists.  
Waller, T. H. .... Plumber.

**NEUSTADT.**

Glebe, Geo. .... Millwright.  
Wahn, V. .... Iron Founder.

**NEWBURGH.**

Asseltine, Billings. .... Mfr. Threshing Machine.  
Stickney, D. B. & Co. .... Iron Founders.  
Taylor, Jas. .... Mfr. Axles.

**NEW EDINBURGH.**

Patterson & Law ..... Machinists.

**NEW GLASGOW.**

McIntyre, Duncan B. .... Millwright.

**NEW HAMBURG.**

Merner, Simpson. .... Iron Founder.

**NEWINGTON.**

Wood, C. H. .... Iron Founder.

**NEWMARKET.**

Adams, Arthur. .... Iron Founder.  
Allen, James ..... Iron Founder.  
Elvidge, Joseph. .... Millwright.  
Lundy & Elvidge. .... Iron Founders.

**NIAGARA FALLS.**

Carter, R. F. & Co. .... Plumbers.  
Stein, C. F. .... Plumber.

**NORMANDALE.**

Gilmour, D. .... Machinist.

**NORTHFIELD.**

Huffmau, Chas. .... Millwright.

**NORWICH.**

Bungay, Lewis F. .... Iron Founder.

**NORWOOD.**

Cope, Peter. .... Iron Founder.

**NOTTAWA.**

Davis, J. M. .... Machinist.

**OAKLAND.**

Vivian, Stephen. .... Millwright.

**OAKVILLE.**

Robertson, Wm. .... Iron Founder.  
Warcup, Isaac & Co. .... Iron Founders.

**ODESSA.**

Babcock, Dow. .... Iron Founder.

**OMEMEE.**

Evans, James. .... Machinist.

**ORANGEVILLE.**

McKittrick, R. J. .... Iron Founder.  
McKittrick, S. H. & Son. .... Iron Founders.

**ORILLIA.**

Brammer, Robt. .... Iron Founder.  
Jackson, John. .... Millwright.  
Reeve, Geo. .... Mfr. Agl. Impts.  
Tutton, Trill & Co. .... Iron Founders.

**ORONDO.**

Leigh, James. .... Machinist.  
McCullough, Jno. .... Iron Founder.  
Tourgie, Lewis. .... Coppersmith.

**ORWELL.**

Morton, Geo. .... Iron Founder.  
Ross, Wm. .... Millwright.

**OSHAWA.**

Bailey, J. G. .... Mfr. Springs.  
Hall, Jos., Mfg. Co. .... Machinist.  
Jaynes, Wm. H. .... Machinist.  
Leek, Wm. .... Plumber.  
Masson, G. A. & Co. .... Mrs. Agl. Impts.  
Oshawa Boiler Works.  
Oshawa Malleable Iron Co.  
Oshawa Stove Co.

**OTTAWA.**

**PLUMBERS, STEAM AND GAS FITTERS.**

Appl. y, W. L. & Co. .... Higman, J.  
Blyth & Kerr. .... Johnstone, Wm.  
Dewis & Chandler. .... Laverdure, Elisee G.  
Faisy, Alexis. .... Murphy, J. P.  
Frederick, Theo. .... Roche, H. G.

**MISCELLANEOUS.**

Baldwin, W. H. & Co. .... Machinists.  
Blasdel, N. S. & Co. .... Iron Founders.  
Campbell & McBride. .... Boiler Makers.  
Drummond, G. P. .... Machinist.  
Garon, Peter. .... Iron Founder.  
Johnstone, Wm. .... Boiler Maker.  
Lamb, Jno. & Son. .... Millwrights.  
Low, Geo. .... Machinist.  
McFarlane, Bros. .... Iron Founders.  
Merrill, H. B. .... Machinist.  
Ottawa Iron and Steel Mfg. Co.  
Perkins, Bros. .... Iron Founders and Machinists.  
Perkins, E. L. .... Iron Founder and Machinist.  
Ripley, C. J. .... Machinist.  
Stewart & Fleck. .... Iron Founders and Machinists.

**OWEN SOUND.**

Christie, David. .... Iron Founder.  
Corbett, Geo. & Sons. .... Iron Founders.  
Kennedy, Wm. & Sons. .... Iron Founders.  
Waites, J. .... Machinist.

**PAISLEY.**

Boyle & Storey. .... Iron Founders.  
Stewart, Jno., Sr. .... Iron Founder.

**PARKENHAM.**

Riddell, John. .... Millwright.

**PALERMO.**

Smith & Co. .... Iron Founders.

**PALMERSTON.**

Oliver & Carter. .... Iron Founders.  
Saunders, Oliver & Kerr. .... Iron Founders.

**PARIS.**

Brown & Co. .... Mfrs. Bolts and Nuts.  
Maxwell, David. .... Iron Founder.  
Patton, W. B. .... Machinist.

**PARKDALE.**

Gowenlock, Jas. .... Millwright.  
Pink, R. .... Credit Valley R. R.  
Weeks, Caleb. .... Plumber.

**PARK HILL.**

Baird, H. C. .... Iron Founder.

**PEABODY.**

Agnew, James. .... Boiler Maker.  
Baker, Geo. .... Boiler Maker.

**PEMBROKE.**

Devlin, Chas.....Iron Founder.  
 Foster, Thos.....Mfr. Axes.  
 Percival, R. C.....Iron Founder.  
 Spurling, Wm.....Millwright.

**PENETANGUISHENE.**

Craig & Cameron.....Iron Founders.

**PERRYTOWN.**

Irwin, Frank.....Millwright.

**PERTH.**

Lillie, Robt.....Iron Founder.

**PETERBORO.**

Forsyth, Wm.....Iron Founder.  
 Hall, Adam.....Coppersmith.  
 Hamilton, Peter.....Iron Founder.  
 Hamilton, Wm.....Iron Founder.  
 Law, McLean & Brayshaw.....Iron Founders.  
 Whyte, James & Co.....Iron Founders.

**PETERSBURGH.**

Neff & Misener.....Iron Founders.

**PETROLIA.**

Draper, T.....Machinist.  
 McKee & Marvick.....Machinists.  
 McKenzie, H. & Co.....Machinists.  
 Petrolia Iron Works.....  
 Stevenson, Wm.....Boiler Maker.

**PICTOU.**

Anning & Moxen.....Iron Founders.  
 Vincent & Noxen.....Iron Founders.  
 Wilson, J. C. & Co.....Iron Founders.

**PLANTAGENET.**

Faulkner, James.....Millwright.

**PORT COLBORNE.**

Richardson, M.....Machinist.

**PORT DOVER.**

Wiggins, Jos.....Iron Founder.

**PORT ELGIN.**

Heller, McLaren, George & Co.....Iron Founders.

**PORT HOPE.**

Haggis, I.....Midland Railway of Canada.  
 Hayden, Thos.....Iron Founder.  
 Helm & Nicholls.....Iron Founders.  
 Mulholland & Brown.....Iron and Steel.  
 Wallace, W. J.....Machinist.

**FORT PERRY.**

Letcher, Joseph.....Millwright.  
 Paxton, Tate & Co., Iron Founders & Machinists.

**PRESCOTT.**

Tinkiss & Dowsley.....Iron Founders.

**PRESQUE ISLE.**

Smith, Thos.....Millwright.

**PRESTON.**

Bauman, Peter.....Machinist.  
 Clare, Bros. & Co.....Iron Founders.  
 Detwiler & Shantz.....Iron Founders.  
 Drueck, Phillip.....Mfr. Files.

**PRINCE ALBERT.**

McDonald, Jno.....Millwright.  
 Sharrard, C.....Millwright.

**QUEENSVILLE.**

Fidel, Joseph.....Machinist.

**RED BAY.**

McFarlane, J.....Machinist.

**RENFREW.**

Francis, Samuel.....Mfr. Axes.  
 Imbeau, Luc.....Iron Founder.  
 Mayhew, Elkanah.....Mfr. Axes.  
 Smith, Jno.....Iron Founder.

**RIDGETOWN.**

McMaster, J. & Co.....Iron Founders.  
 Watt, James.....Iron Founder.

**RIDGEWAY.**

Canada Iron Forge Works.  
 Hershey, Andrew.....Machinist.  
 Learn, Peter, & Son.....Iron Founders.

**ROBERTSVILLE.**

Roberts Iron Co.

**ROSLIN.**

White, Jno.....Iron Founder.

**ST. CATHERINES.**

Abell, C.....Machinist.  
 Gurney, E. C., & Co.....Plumbers.  
 Lloyd, Geo.....Plumber.  
 Oill, Geo. N.....Iron Founder.  
 Ratcliffe & Parnell.....Sheet Iron Works.  
 Thomas, D. R.....Machinist.  
 Whitman & Barnes Mfg. Co.....Mfrs. Mowing & Reaping Machine Knives.

**ST. GEORGE.**

Bell, R., & Son.....Iron Founders.  
 Skimon, James.....Iron Founder.

**ST. MARY'S.**

Moore, John, & Son.....Iron Founders.  
 O'Brien, Matthew.....Machinist.  
 Reid, Robt.....Iron Founder.

**ST. THOMAS.**

Blackmore, J. J., & Co.....Plumbers.  
 Brent & Sherman.....Mfrs. Rivets & Bolts.  
 Cochrane Mfg. Co.....Agrl. Impl'ts.  
 Erie Iron Works.  
 Haggert & Cochrane Mfg. Co.....Iron Founders.  
 Hughes & Smith.....Plumbers.  
 Kingstone, J. S.....Plumber.  
 Norworthy, C., & Co.....Iron Founders.  
 Redman, Edward.....Millwright.  
 Risdon Bros.....Plumbers.  
 Russell, B. F., & Co.....Mfrs. Car Wheels.  
 Short, W. A.....Canada Southern R. R.  
 Smale, Hazleton & Robinson.....Iron Founders.  
 Taylor, Geo.....Boiler Maker.

**ST. WILLIAMS.**

Wilson, John.....Mfr. Plows.

**SALEM.**

Filchle, Arch.....Iron Founder.

**SALFORD.**

Sabine, Jos.....Millwright.

**SARNIA.**

Blalkie & McKay.....Iron Founders.  
 Peterson, N. C.....Iron Founder.

**SCOTLAND.**

Malcolm, Horace F.....Iron Founder.

**SEAFORTH.**

Foster & Sons.....Iron Founders.  
 Hendry & Thomas.....Iron Founders.  
 Huron Foundry.  
 Nopper Bros.....Iron Founders.

**SELKIRK.**

Yocum, W. H.....Mfr. Plows.

**SHANNONVILLE.**

Pegan, Robt. F.....Iron Founder.

**SHELBURNE.**

Wilson, J. & M., & Co.....Iron Founders.

**SHERKSTON.**

Brillinger, Sam.....Millwright.

**SIMCOE.**

Algeo, John.....Iron Founder.  
 Fisher, Donald.....Iron Founder.  
 Massey Mfg. Co.....Agrl. Impl'ts.  
 West & Plachy.....Iron Founders.

**SMITH'S FALLS.**

Frost & Jones.....Malleable Iron Works.  
Frost & Wood.....Iron Founders.  
Gould, J. H.....Iron Founder.

**SMITHVILLE.**

Bates, James S., & Son.....Iron Founders.  
Woodland & Beatty.....Iron Founders.

**STAYNOR.**

Levey, W. H.....Iron Founder.  
Myles, A.....Machinist.

**STIRLING.**

Graham, John.....Iron Founder.

**STOCKDALE.**

Steanburgh, Anson.....Millwright.

**STOUFFVILLE.**

Gibney & Son.....Iron Founders.

**STRATFORD.**

McDonald, McPherson & Co.....Iron Founders.  
Sharman, James.....Iron Founder.  
Yandle, T.....Mfr. Plows.

**STRATHROY.**

Craig, F. J.....Iron Founder.  
Statnam, E., & Son.....Machinists.  
Vary, David W.....Iron Founder.

**SYDENHAM.**

Madden, Daniel.....Millwright.

**TAMWORTH.**

Bragg, Wm.....Iron Founder.

**TARA.**

Gerolamy, W. A.....Iron Founder.

**TEESWATER.**

Gillies & Martin.....Iron Founders.

**TEETERVILLE.**

Manuel, Obed.....Iron Founder.

**THAMESFORD.**

Hull, Hazard.....Machinist.

**THISTLETOWN.**

Cave, Edward P.....Millwright.

**THORNHILL.**

Clay, Thos. W.....Millwright.

**THOROLD.**

Chappel, Robert.....Millwright.  
Dobbie & Stewart.....Iron Founders.  
Wilson, James.....Iron Founder.

**TILSONBURG.**

Avery, A. A.....Machinist.  
Darrow, Geo. & John.....Iron Founders.  
McCrae, H. F.....Machinist.  
Padfield, Herbert.....Machinist.  
Skelton, Wm.....Iron Founder.  
Tillson, Edwin D.....Machinist.  
Tilsonburg Iron Works.  
Toronto Reaper & Mower Co.  
Union Iron Works.  
Vivian, Wm.....Millwright.  
Waller, Thos.....Iron Founder.

**TIVERTON.**

McDonald, J. B.....Iron Founder.

**TORONTO.****BRASS FOUNDERS.**

Arnott, A.....60 Victoria.  
Atwood, Jos.....58 Victoria.  
Caiger, Robt. N.....27 Adelaide.  
Collins, T. C.....612 Yonge.  
Cousins, Ed. J.....26 Temperance.  
Fogg, John.....192 King.  
Lauder, Thornton Mfg. Co.....96 Adelaide.  
Medcalf, F. H. & Son.....503 King.  
Morrison, James.....75 Adelaide W.  
Parker, J. O.....cor. Globe Lane & Adelaide.

**TORONTO—Continued.****IRON FOUNDERS.**

Armstrong, J. R. & Co.....161 Yonge.  
Atlas Foundry.....15 Frederick.  
Beckett, Edward.....50 Queen, W.  
Bertram & Co.....114 Yonge.  
Boyle & Richardson.....453 Queen, W.  
Brooks, J. H.....77 Richmond, W.  
Connor, Webb & Co.....22 to 28 Boulton.  
Evans, E. C.....22 Queen St.  
Good, James.....8 Queen, E.  
Gurney, E. & C. & Co.....91 Yonge.  
Harte, Jno. & Co.....14 to 26 Esplanade.  
Medcalf, F. H. & Son.....503 King, E.  
Rice, Lewis & Co.....206 Front, E.  
Tomlinson, Thomas.....9 & 11 Frederick.  
Vyse, James.....151 York.

**MACHINISTS.**

Dicks, Wm.....22 Sheppard.  
Doig, Alex.....55 Nelson, W.  
Doty, Jno.....2 Myles' Wharf.  
Evan, E. C.....22 Queen, W.  
Fensom, John.....29 Adelaide.  
Field, Chas.....112 Queen, W.  
Findlay, James.....52 Esplanade, E.  
Harrington, Jno.....244 King, E.  
Inglis & Hunter.....Strachan Ave.  
Lalor, Thos. & Sons.....19 Lorne.  
Martin, James, Jr.....66 King, W.  
Martin, Peter.....Foot W. Market.  
McKnight, A.....162 Victoria.  
McKnight, Hugh.....162 Victoria.  
McRae, Alex.....227 King, E.  
Northey & Co.....Front & Parliament.  
Pendreith, G. T.....59 Adelaide.  
Perkins, John.....Front & Princess.  
Rogers, S. C.....105 Bay.  
Snell, Theodore & Co.....31 Adelaide.  
Turner, John & Son.....477 Yonge.  
Vyse, James.....151 York.  
Westman & Baker.....119 Bay.

**PLUMBERS, STEAM AND GAS FITTERS.**

Bennett & Wright.....72 Queen, E.  
Burroughs, W. J.....373 Queen, W.  
Caiger, Robert H.....27 Adelaide.  
Cl-ws, Jno.....66 Adelaide.  
Collins, T. C.....612 Yonge.  
Crappier, James, Sr.....32 Duke.  
Cumings & Wells.....175 King, W.  
Fiddes & Hogarth.....53 Jarvis.  
Filby, James.....297 Church.  
Flaherty, James.....222 Queen W.  
Gee & Co.....294 King E.  
Gibson, Allen.....74 Adelaide.  
Gibson, W. J.....34 Queen E.  
Guest, J. H. & G.....59 Queen, E.  
Harding, Geo.....106 King, W.  
Hawkes, F. B.....53 Dundas.  
Hurst, James.....114 Adelaide, E.  
Johnson, J.....146 Queen, E.  
Keith, David S. & Co.....109 King, W.  
Kingham, David W.....97 Church.  
Lear, R. H.....171 Yonge.  
Lewis, Wm.....127 York.  
Locke, Robt.....860 1/2 Yonge.  
McGuire & Bird.....295 Queen, W.  
McGuire, W. J. & Co.....86 King, W.  
McLaren, Thos.....870 Yonge.  
Malcolm, Wm. B.....89 Church.  
Meadows, S.....31 Queen, W.  
Mickerborough, Geo.....379 King.  
Morton, Andrew.....421 Yonge.  
O'Neill, James N.....115 Church.  
Phillips, Joseph.....179 King, W.  
Richards, Bros.....248 Queen, W.  
Ritchie & Co.....64 King, W.  
Ritchie, Jno., Sr.....64 Adelaide, E.  
Wallis, V. J.....527 Queen, W.  
Wright, Jno.....403 Yonge.

**MISCELLANEOUS.**

Anderson, Alex. & Co.....Boiler Makers.  
247 1/2 King E.  
Bickford, E. O., Iron.....81 York.  
Booth & Son, Coppersmiths.....219 Yonge.

**TORONTO—Continued.**

Carroll & Dunsbaugh.....Mfrs. Car Wheels,  
66 Adelaide, W.  
Clarke, Peter.....Northern & Norwestern Ry.  
Clews, Jno., Coppersmith.....629 Yonge.  
Cole, Ashley D., Millwright.....520 Wilton Ave.  
Currie, Neil, Machinery.....Foot Frederick.  
Dominion Bolt & Nut Co.....139 Front, E.  
Electric & Hardware Mfg. Co.....352 King, W.  
Gee & Co., Coppersmiths.....294 King E.  
Graham, Thos., Mfr. Files.....35 Sherbourne.  
Howard, Caleb, Mfr. Files.....184 York.  
Patterson & Rabin, Iron Works.....28 Front, E.  
Perkins, Jno., Boiler Maker.....Front & Princess.  
Taylor, J. & J., Mfrs. Saws.....117 and 119 Front, E.  
White, J. G. & Co., Scale Works.....102 Adelaide.  
Whitefield, Jno., Mfr. Chains.....106 Front, E.  
Wilson, Chris. & Son.....Mfrs. Scales.  
45 Esplanade, E.

**TOTTENHAM.**

Summer Bros.....Iron Founders.

**TRENTON.**

Weddell, R. & A.....Machinists.

**TWEED.**

Garrett, W. H.....Iron Founder.

**UNDERWOOD.**

McKay, Angus J.....Millwright.

**UTTERSON.**

McCaffery, Duncan.....Millwright.

**UXBRIDGE.**

Button & Moore.....Mfrs. Agl. Implts.  
Stewart, W. B.....Iron Founder.

**VANKLECK HILL.**

Routhier, Felix.....Iron Founder.

**VIENNA.**

Marlatt, Robert.....Iron Founder.  
Sheldon, Griffin.....Machinist.

**WALKERTON.**

Bobier, G. G.....Millwright.  
Fisher & Pulford.....Iron Founders.

**WALKERVILLE.**

Kerr Bros.....Iron Founders.

**WALLACEBURG.**

Lee, John.....Machinist.

**WALLACETOWN.**

Hall, Wm.....Iron Founder.  
McBrayen, A.....Machinery.

**WALTERS FALLS.**

McQuaker, Wm.....Machinist.

**WARDSVILLE.**

Henderson, Henry.....Iron Founder.

**WARMINSTER.**

O'Brien, Michael.....Millwright.

**WATERDOWN.**

Brown & Baker.....Mfrs. Rakes.

**WATERFORD.**

Green, Bros. & Co.....Mfrs. Agl. Impl'ts.

**WATERLOO (Waterloo Co.).**

Bricker, Levi.....Machinist.  
Bricker, J. & L.....Iron Founders.  
Hoffman, Wegenast & Co.....Mfrs. Rakes.  
Merner, Absalom.....Iron Founder.

**WATFORD.**

Bole Stickle Mfg. Co.....Iron Founders.  
Doherty, Thomas.....Iron Founder.

**WATSON'S CORNERS.**

Buffan, William C.....Millwright.  
Park, James.....Millwright.

**WELLAND.**

Beatty, M. & Sons.....Machinists & Iron Founders.  
Griffith, H.....Machinist.  
Haun, Jno. A.....Iron Founder.  
Robertson Bros.....Machinists.

**WELLESLEY.**

Ernet, Christian.....Millwright.  
Schaub, M. & L.....Iron Founders.

**WELLINGTON.**

Clinton, David.....Iron Founder.

**WESTON.**

Coulter, James.....Machinist.  
Forsyth, Chas.....Millwright.  
Plowman, Benj.....Iron Founder.  
Sloane, David.....Millwright.

**WESTPORT.**

Taggart, A.....Iron Founder.

**WHITBY.**

Brown & Patterson Mfg. Co.....Agl. Implts.  
Harper, Major.....Machinist.  
Male, Chas. S.....Machinist.

**WIARTON.**

Sinclair, Geo. & Bro.....Iron Founders.

**WINDSOR.**

Hannan, Jno.....Plumber.  
Hutton, Jno.....Plumber.  
Jones, Felix.....Iron Founder.  
McGregor, Jno. & Son.....Boiler Makers.  
Windsor Boiler Works.  
Young, Chas.....Plumber.

**WINGHAM.**

Robinson, R. M.....Iron Founder.

**WOODBIDGE.**

Abell, Jno.....Mfr. Agl. Impl'ts.  
Todd & Beasley.....Iron Founders & Machinists.

**WOODSTOCK.**

Callin, James J.....Gas Fitter.  
Thompson, Geo.....Iron Founder.  
Watson, Alex.....Iron Founder.  
Whitelaw, Robt.....Iron Founder.

**WOODVILLE.**

Campbell, Arch.....Iron Founder.  
White, W. C.....Iron Founder.

**WROXETER.**

Whelan, Black & Sibley.....Iron Founders & Machinists.

**YARKER.**

Connolly & Son.....Iron Founders.

**YORKVILLE.**

Oram, Jno. W.....Plumber.

**QUEBEC.****ANGELINE.**

Saurette, Pierre.....Machinist.

**BEAUHARNOIS.**

Manny, Emilien.....Iron Founder.

**BEAUPORT.**

Chinie & Beaudet.....Mfrs. Nails.

**BEDFORD.**

Horskin, Horatio.....Iron Founder.  
Rixford, Oscar S.....Mfr. Scythes.  
Shaw, N. H.....Mfr. Sewing Machines.

**BERGERVILLE.**

Martineau, T.....Plumber.

**BERTHIER EN HAUT.**

Lefebvre, Jos.....Iron Founder.

**BROME CORNERS.**

Berry, Wm.....Machinist.

**CHARLESBOURG.**

Plamondson, Joseph.....Mfr. Tacks.

**CHICOUTIMI.**

Warren, Wm.....Machinist.

**COATICOOK.**

Sleeper &amp; Ackhurst.....Machinists.

**COTE ST. PAUL.**

Bausch, Frederick.....Mfr. Files.  
 Clark, O. L.....Bell Founder.  
 Dunn, P.....Mfr. Horse Nails.  
 Gilmour, G.....Mfr. Augers.  
 Robert, Francis.....Machinist.  
 Warren, H. H.....Mfr. Hammers.

**DANVILLE.**

Barnard, W.....Iron Founder.

**FITCH BAY.**

Doloff, H. A.....Millwright.

**DESCHAMBAULT.**

Nault, Damase.....Mfr. Threshing Machines.

**EAST FARNHAM.**

Villas, Wm. F.....Iron Founder.

**FRAZERVILLE.**

Smith, Wm.....Iron Founder.

**GENEVA.**

Mynott, Edward.....Machinist.

**GRANBY.**

Masse, Joseph.....Machinist.

**GREEN ISLAND.**

Bertrand, Chas. &amp; Co.....Iron Founders.

**HELENA.**

Tuggey, Chas.....Mfr. Plows.

**HOCHELAGA.**

Cowan, Diott &amp; Co.....Mfrs. Springs.

**HOWICK.**

Maw, R.....Machinist.

**HULL.**

Lanouette, Joseph.....Iron Founder.

Washburn, Sexton.....Mfr. Axes.

**HUNTINGDON.**

Boyd &amp; Co.....Iron Founders.

**IBERVILLE.**

Bessette, J. &amp; S.....Mfrs. Threshing Machines.

Couture, Louis, Sr.....Iron Founders.

**INVERNESS.**

McKenzie, T. &amp; J.....Millwrights.

**JOLIETTE.**

Derouin, Onesime.....Mfr. Threshing Machines.

Joliette Foundry Co.....

Laforest, Pierre.....Iron Founder.

Masse, Alexis.....Mfr. Threshing Machines.

**LACHUTE.**

Charlebois, E. &amp; Bro.....Iron Founders.

**LACHUTE MILLS.**

McOuat &amp; McRae.....Iron Founders.

**LACOLLE.**

Force, A. &amp; Co.....Iron Founders.

**LAMBTON.**

Bureau, Zephyrin.....Millwright

**LES ESCURENILES.**

Dassault, Celestin.....Millwright.

**LEVIS.**

Beaulieu, A. T.....Iron Founder.

Carrier, Laine &amp; Co.....Iron Founders.

St. Laurent, Benj.....Iron Founder.

**LONGUEUIL.**

Cusson, A. &amp; C.....Iron Founders.

**LOBBINIERE.**

Bernier, Henry.....Iron Founder.

Videl, J. L. O.....Iron Founder.

**LOUISEVILLE.**

Desrosier, O. &amp; A.....Iron Founders.

**MAPLE LEAF.**

Rand, G. S. D.....Millwright.

**MOE'S RIVER.**

Byron, E. L.....Machinist.

**MONTMAGNY.**

Belanger, A.....Iron Founder.

**MONTREAL.****IRON FOUNDERS.**

Bartley, W. P. &amp; Co.....17 to 29 Mill.

Beauchemin, A. &amp; Co.....42 St. Louis.

Brush, George.....14 to 34 King.

Clendinning, Wm.....145 William.

Day &amp; Deblois.....120 Ann.

Findlay, John.....Cor. Albert &amp; Vinet.

Gardner, Robt. &amp; Son.....40 Nazareth.

Garth, Chas. &amp; Co.....536 Craig.

Mahan, C. B. &amp; Co.....29 Dalhousie.

McDougall, John.....530 William.

McIntosh, John &amp; Son.....Cor. Nazareth &amp; Brennan.

Rogers &amp; King.....645 Craig.

**MACHINISTS.**

Bartley, W. P. &amp; Co.....17 to 29 Mill.

Bateman, W. &amp; Co.....215 Fortification Lane.

Bradley, Geo.....131 Fulford.

Brisette, S. J.....23½ &amp; 25 Cotte.

Brush, Geo.....14 to 34 King.

Donaldson, Robt.....572 Craig.

Gardner, Robt. &amp; Son.....40 Nazareth.

Garth, Chas. &amp; Co.....536 Craig.

Gentesse, Camille.....30 St. Charles Borromeo.

Gilbert, E. E. &amp; Sons.....722 St. Joseph.

Kendall, G. H. &amp; Co.....517 Lagachetiere.

Kieffer, J.....126 Drolet.

Kieffer Bros.....637 Craig.

Laurie, John &amp; Bro.....72 &amp; 74 Wellington.

Lawson, James.....14 Jurors.

Lunn, G. J. &amp; Co.....711 &amp; 711½ Craig.

Miller Bros. &amp; Mitchell.....110 King.

Nish, Wm.....127 Fulford.

Page, Chas.....28 St. Charles Borromeo.

Solomon, E. &amp; Co.....12 Hermine.

Thomson, R. &amp; Son.....18 St. Constant.

Weir, J. C. &amp; R. S.....31 &amp; 33 Nazareth.

Wells, Geo.....34 &amp; 36 St. George.

**PLUMBERS, STEAM AND GAS FITTERS.**

Baillie, Henry.....52 City Councillors.

Bellavance, Edouard.....966 St. Catharine.

Bernier, Ed.....307 St. Lawrence.

Briggs, Wm.....40 San Antoine.

Brunt, F.....48 &amp; 50 Jacques Cartier Sq.

Burns &amp; Gormley.....673 &amp; 675 Craig.

Date, John.....654 &amp; 656 Craig.

Deblois &amp; Carpentier.....280 St. Lawrence.

Delorme, Joseph.....254 St. Lawrence.

Drapeau &amp; Savignac.....120 St. Lawrence.

Egan, H. A.....59 Metcalfe.

Gathouse, Felix.....28 St. Elizabeth.

Glen, C.....685 Dorchester.

Gordon &amp; Egan.....120 Mansfield.

Greene, F.....95 St. Peter.

Hughes &amp; Stevenson.....745 Craig.

Jubin, C. &amp; Co.....126 Duke.

Markum, John &amp; Co.....52 &amp; 54 San Antoine.

Martin, John.....27 San Antoine.

Mattinson, James.....577½ Craig.

Richardson, Isaac &amp; Son.....12 McGill College Av.

Sadler, James A.....66 Mans.

Serton, Daniel.....43 St. John.

Sicotte, A. &amp; Co.....331 St. Lawrence.

State, John.....1446 St. Catharine.

Tabb, H. N. &amp; Co.....11 Hermine.

Walker, Wm.....183 San Antoine.

Warminton, R. &amp; W.....97 &amp; 99 King.

Yon, Geo.....250½ St. Lawrence.

Young, Andrew.....768 Craig.



**MONTREAL—Continued.****MISCELLANEOUS.**

Beauchemin & Co., Mfrs. Threshing Machines.....	304 Craig.
Bellhouse, Macpherson & Co., R. R. Supplies.....	49 S. François Xavier.
Boudrias, G. & Co., Iron, Steel, etc.....	635 St. Catharine.
Brown, James, Millwright.....	95 Duke.
Buchanan, R. H. & Co., Machinery.....	662 Craig.
Byers, Wm. & Co., Mfrs. Axes.....	512 & 514 St. Paul.
Canada Bolt & Latch Co.,.....	515 Lagauchetiere.
Canada Screw Co.,.....	337 St. Paul.
Canadian Iron & Steel Co.,.....	264 St. James.
Chanteloup, E., Brass Founder.....	587 Craig.
Chapleau, G., Mfr. Saws.....	784 Ontario.
Coghlin, Bernard J., R. R. Supplies.....	413 St. Paul.
Cooper, Fairman & Co., R. R. Supplies.....	42 & 44 Foundling.
Copland & McLaren, Iron, etc., 80 & 82 Grey Nun.	
Cossitt, G. M. & Bro., Mfrs. Agl. Impts.....	79 & 81 McGill.
Cuthbert, R. & Son, Brass Founders.....	49 William.
Edwards, C. D., Mfr. Saws.....	39 St. Bonaventure.
File & Spiral Spring Co.,.....	198 St. James.
Garth, Chas. & Co., Brass Founders.....	542 Craig.
Gordon, A., Mfr. Scales.....	73 College.
Goudron, Freres, Mfr. Bolts, Nuts, etc.,.....	34 Dowd.
Gurney E. & Co., Plumbers' Supplies.....	337 St. Paul.
Irving, Geo., Jr., R. R. Supplies.....	17 St. Peter.
Ives, H. R. & Co., Mfrs. Hardware.....	117 Queen.
Jeffrey, Alex., Millwright.....	116 Canning.
Kilby & Abbott, R. R. Supplies.....	10 St. Sacrament.
Lacoste & Co., R. R. Supplies.....	514 St. Paul.
McDougal, J. & Co., Mfrs. Car Wheels.....	St. Gabriel Locks.
MacKenzie, Richard, R. R. Supplies.....	69 St. Sulpice.
Mitchell, R. & Co., Brass Founders.....	682 Craig.
Mockew, W. & Son., Mfrs. Edge Tools.....	St. Gabriel Locks.
Montreal Malleable Iron Co.,.....	44 St. George.
Montreal Rolling Mills Co.,.....	409 St. Paul.
Montreal Saw Works.....	456 St. Paul.
Mooney, W. M. & Co., Mfrs. Nails.....	145 Mill.
Old, B. L. & Co., Mfrs. Threshing Machines.....	170 Mullins.
Outram, G. & Son, Mfrs. Files.....	St. Gabriel Locks.
Peck, Benny & Co., Mfr. Nails.....	67 Mill.
Petener, B. J., Machinery.....	39 & 41 William.
Pillow, Hersey & Co., Mfrs. Nails.....	91 St. Peter.
Pringle, Thomas, Millwright.....	527 St. Joseph.
Prosser, Thomas, Brass Founder.....	574 Craig.
Robertson, James, Mfr. Saws.....	200 Da House.
Smith, John, Mfr. Threshing Machines.....	St. Gabriel Locks.
Stacey, Chas., Mfr. Nails.....	St. Gabriel Locks.
Waddell, S. & Co., R. R. Supplies.....	27 St. John.
Warren, H. B. & Co., Mfrs. Scales.....	763 Craig.
White, J., Boiler Maker.....	98 Grand Trunk.
White, R. C., Boiler Maker.....	43 Prince.
White, W. C., Boiler Maker.....	110 Wellington.

**MURRAY BAY.**

Gagnon, Jean.....Millwright.

**MYSTIC.**

Walbridge, A. S.....Iron Founder &amp; Machinist.

**NAPIERVILLE.**

Trudeau, Jas., Jr.....Iron Founder.

**PETITE COTE**

Jeffrey Bros.....Mfrs. Agl. Impts.

**PLEISSVILLE.**Doucet, Stanislas.....Machinist.  
Painchaud, P. & P.....Mfrs. Agl. Impts.**PORTAGE DU FORT.**

Railray, D. M.....Iron Founder.

**QUEBEC.****PLUMBERS, STEAM AND GAS FITTERS.**

Derby, W.....	25 St. Patrick.
Ford & Anderson.....	28 Garden.
Maguire, J.....	8 St. Ursula.
McTaggart, Jno.....	66 Little Champlain.
Mulholland, A.....	70 St. John.
Phillips, Geo. T.....	11 St. John.
Phillips & O'Sullivan.....	Cor. Des Fosses and St. Dominique.
Ryan & Keraghan.....	101 St. John.
Sampson & Co.....	249 St. John.
Sampson, R. & H.....	10 D'Youville.
Thom, Alex.....	47 St. John.
Vandry, Z.....	163 St. John.

**MISCELLANEOUS.**

Bisset Bros., Iron Founders.....	14 St. Valier.
Black, Henry, Iron Founder.....	145 & 147 Champlain.
Breth & Audard, Machinists.....	75 St. Joseph.
Hatch Bros., Iron Founders.....	103 Assurance.
Learmouth, Alex. & Co., Iron Founders.....	169 St. Paul.
Lee, Richard, Machinist.....	202 St. Paul.
Marcotte, Jacques, Iron Founder.....	70 Crown.
Murray, Marshall, Machinist.....	2 St. Francois.
Neil, R., Boiler Maker.....	45 Qu. en.
Riverin, Plante & Co., Iron Founders.....	102 St. Paul.
Rosseau, A., Jr., Iron Founder.....	175 St. Paul.
Swindell, E. & Bro., Shipsmiths.....	283 Champlain.
Terrean, Mrs. Chas., Iron Founder.....	136 St. Paul.
Tweedell, John, Ship-mith.....	142 Champlain.
Whitty, P.....	Iron Worker & Machinist.
Wurtele, C. & W.....	Iron.

**RICEBURGH.**

Rice, M. W.....Iron Founder.

**RICHMOND.**Hurlbart, J. H.....Machinist.  
Murray, Patrick H.....Iron Founder.**RIGAUD.**

Desjardins, Jules A. &amp; Bro.....Iron Founders.

**RIVER DAVID.**

Chamberland, Henry.....Iron Founder.

**RIVIERE DU LOUP (on bas).**

Smyth, Wm.....Iron Founder.

**RIVIERE DU LOUP (on haut).**

Desrosiers, A. &amp; O.....Iron Founders.

**ROCKBURN.**

Steele &amp; Henderson.....Iron Founders.

**ROCK ISLAND.**Butterfield & Co.....Machinists.  
Hay, James.....Iron Founder.**ST. ANSELME.**

Laroche, L. N.....Iron Founder.

**ST. CESAIRE.**

Masse, P. O.....Iron Founder.

**ST. CHARLES.**

Bernier, Hyprien.....Millwright.

**ST. CUNEGONDE.**

Conillard, Louis.....Plumber.

**ST. CYRILLE.**

Aubut, Benoni.....Millwright.

**ST. ELIZABETH.**

Guilbault &amp; Frere.....Iron Founders.

**ST. GENEVIEVE.**

Normandeau, Stanislas.....Iron Founder.

**ST. GERMAN.**

Arpin, Louis.....Iron Founder.

**ST. GREGOIRE.**

Bergeron, O. J.....Iron Founder.

**ST. HENRI.**

Scullion, John.....Boiler Maker.

**ST. HILARI.**

Brouillet, Alexis.....Iron Founder.

**ST. HYACINTHE.**

Bederd, J. B.....Iron Founder.  
Chagnon, A.....Machinist.  
Dusseau, H.....Iron Founder.  
D.vane, Timotry.....Iron Founder.  
Fréchette, Isidre.....Machinist.  
Gregoire, A.....Iron Founder.  
Laperche, L. E.....Machinist.

**ST. ISIDORE.**

Beaudoin, F. X.....Millwright.

**ST. JEAN DES CHAILLONS.**

Jacques, F. X.....Millwright.

**ST. JEANNE DE NEUVILLE.**

Julien, Chas. A.....Mfr. Agl. Impts.

**ST. JEROME.**

Laviolette & Dagesse.....Iron Founders.

**ST. JOHNS.**

Lareau, L.....Iron Founder.

**ST. MARIE DE LA BEAUCE.**

Bernier, D.....Iron Founder.

**ST. MARIE DE MONNOIR.**

Ponton, Louis.....Mfr. Threshing Machines.

**ST. OURS.**

Gregoire, Abraham.....Iron Founder.

**ST. PAUL L'HERMITE.**

Marchaud, Gaspard.....Mfr. Plows.

**ST. PLACIDE.**

Gadowrie & Dubrue.....Iron Founders.  
Guilbault, Lazare.....Iron Founder.

**ST. RAYMOND.**

Sissons, Thomas.....Machinist.

**ST. REMI.**

Gagne, D.....Iron Founder.  
Remond, Ambroise.....Mfr. Threshing Machines.  
Renaud, Alphonse.....Mfr. Threshing Machines.  
Therien & Bro.....Mfrs. Threshing Machines.

**ST. SULPICE.**

Robillard, Joseph.....Mfr. Agl. Impts.

**ST. THOMAS DE PIERREVILLE.**

Gill, Napoleon.....Machinist.

**ST. VALLIER.**

Belanger, Gabriel.....Millwright.

**SCOTTSTOWN.**

Parker & Jencke.....Millwrights.

**SHERBROOK TOWN.**

Ackley, Robt.....Millwright.  
Chapman, J. M. & Co.....Mfrs. Files.  
Jencks, Sylvester B & Son.....Machinists.  
Johnson, E. A.....Millwright.  
Johnston, O. N.....Millwright.  
Moody & Chapman.....Mfrs. Files.  
Simoneau, F. X.....Millwright.  
Sewright, James.....Quebec Central R. R.

**SOREL.**

Beauchemin & Fils.....Engine Works.  
Beauregard, Alexis.....Mfr. Axes.  
Beauregard, Augustin.....Mfr. Axes.  
Bellerose, J. O.....Iron Founder.  
Bruneau, J. J.....Iron Founder.  
Lamoureux, R.....Iron Founder.  
Nolin, Frederick.....Machinist.  
Patenaude, N. F.....Iron Founder.  
Pontbrilliant, G. A.....Machinist.  
Richelieu Axe Co.

**STANFOLD.**

Brisset, Joseph.....Iron Founder.

**STOCKWELL.**

Patenaude, M.....Iron Founder.

**STOTTVILLE.**

Emo, Wm.....Machinist.

**SUTTON.**

Dorey, S.....Iron Founder.

**THREE RIVERS.**

Bellefeuille, F. X. & Bro.....Iron Founders.  
Luckerhoff Bros.....Plumbers.  
McKelvie Bros.....Machinists.  
R-millard, Remi.....Iron Founder.  
Viger & Sawyer.....Iron Founders.

**TRENHOLM.**

Boast, James.....Mfr. Plows.

**VALLETORT.**

Dallaire, Edouard.....Millwright.

**VALLEYFIELD.**

Anderson, James T.....Iron Founder.

**VERCHERES.**

Guyon, Philippe.....Iron Founder.  
Prive & La Rose.....Iron Founders.

**WATERLOO.**

Allen, Taylor & Co.....Iron Founders.

**NEW BRUNSWICK.****CARLETON.**

Allen Bros.....Iron Founders.

**CHATHAM.**

Gillespie, Thomas F.....Iron Founder.  
Miramichi Foundry Co.  
Nelson, J.....Machinist.  
Thornton, J.....Machinist.

**COLD BROOK.**

Scovil, E. G.....Rolling Mill.

**EDMUNSTON.**

Emerson, William.....Iron Founder.

**FAIRVILLE.**

Mealy & Clark.....Iron Founders.

**FREDERICTON.**

Limerick, Reid & Co.....Plumbers.  
McFarland, Thompson & Anderson.....Founders.  
O'Brien, J. & J.....Gas Fitters.

**GIBSON.**

Matthews, Jesse.....New Brunswick Railway.

**GREENWICH.**

Whelpley, J. Albert.....Mfr. Skates.

**INDIANTOWN.**

Miller & Waring.....Machinists.  
Waring, George H.....Machinist.

**MILLTOWN.**

Andrews, John D.....Mfr. Edge Tools.  
Hennigar & Ray.....Mfrs. Saws.

**MONCTON.**

Ferguson & Watson.....Gas Fitters.  
Peters Combination Lock Co.  
The Record Foundry & Machine Co.  
Weir, Jonathan.....Machinist.

**MOOSEPATH.**

Scovil & Purdy.....Rolling Mill.

**NEW CASTLE.**

Fairman, Richard.....Iron Founder.  
Murray, James.....Iron Founder.

**PORTLAND.**

Chelsey, J. A. & W. A. .... Mfrs. Iron Knees.  
Hazelhurst & Co. .... Iron Founders.  
McAfee, Jos. .... Iron Founder.  
Measey & Clark. .... Iron Founders.  
Wales, James. .... Brass Founder.  
Young, Adam. .... Iron Founder.

**QUEENSBURY.**

Bradbury, George W. .... Millwright.

**SACKVILLE.**

Cogswell, E. & Co. .... Iron Founders.  
Fawcett, C. .... Iron Founder.

**ST. ANDREWS.**

Lamb, Andrew. .... Iron Founder.

**ST. GEORGE.**

Logan, T. Grand Southern Ry. of New Brunswick.

**ST. JOHN.**

**PLUMBERS, STEAM AND GAS FITTERS.**

Blake, Geo. .... Dunbrack, Henry.  
Bowe, A. G. .... Flood & McDevitt.  
Campbell, Thos. .... Rowan, Archibald.  
Carroll, David. .... Willis, Chas.  
Doody & Toie. .... Woodling, C. S.

**MISCELLANEOUS.**

Abrams & Herr. .... Machinists.  
Allan, Harris. .... Brass Founder.  
Allen Bros. .... Iron Founders.  
Armstrong Bros. .... Iron Founders.  
Banfill, E. & Co. .... Machinists.  
Brown, W. H. .... Shipsmith.  
Burpee, I. & F., & Co. .... Mfr. Car Springs.  
Carvill, George. .... Iron.  
Fleming, George, & Son. .... Iron Founders.  
Foster, S. R., & Son. .... Mfrs. Nails.  
Fowler, Josiah. .... Mfr. Edge Tools.  
Harris, J., & Co. .... Rolling Mill.  
Hazelhurst & Co. .... Iron Founders.  
Hevenor, George. .... Brass Founder.  
Honeywill, Wm. .... Mfr. Saws.  
Lawton, J. Frederick. .... Mfr. Saws.  
Lewis, Wm. .... Shipsmith.  
McAvity, T., & Sons. .... Brass Founders.  
McGoldrick, John. .... Iron, &c.  
McIntire, A. .... St. John & Maine Railway.  
McKay & Toll. .... Brass Works.  
McLachlan, D., & Sons. .... Boiler Makers.  
Moore, E. R., & Co. .... Mfrs. Nails.  
Myers, Samuel. .... Mfr. Axes.  
Myers, W. Fred. .... Machinist.  
Pender, James. .... Mfr. Nails.  
Priehard & Son. .... Iron.  
St. John Bolt & Nut Factory.  
Smith, Wm. B. .... Shipsmith.  
Thompson, W. J. .... Mfr. Safes.  
Vaughan, L. H., & Bros. .... Iron, &c.  
Wills, Robert. .... Shipsmith.  
Wilson, Walter. .... Mfr. Saws.  
Wisdon & Fish. .... Machinists' Supplies.  
Yeats, Alexander, & Son. .... Iron.  
Young, Adam. .... Iron Founder.

**ST. STEPHEN.**

Broad, E., & Son. .... Mfrs. Axes.  
Eaton, Moccasin. .... Mfr. Iron.  
Flaherty Bros. .... Iron Founders.  
McDonald, Wm., & Son. .... Machinists.  
Veazy, John. .... Mfr. Edge Tools.

**SACKVILLE.**

Cogswell, E., & Co. .... Iron Founders.  
Fawcett, Chas. .... Iron Founder.

**SALISBURY.**

Killam, Robert C. .... Mfr. Mill Machinery.

**SUSSEX.**

Howes, Wm. .... Iron Founder.

**UPPER SANDUSKY.**

Bradbury, George W. .... Millwright.

**WOODSTOCK.**

Connell Bros. .... Iron Founders.  
Small & Fisher. .... Machinists.  
Union Foundry Co.  
Woodstock Iron Co.

**NEWFOUNDLAND.**

**ST. JOHNS.**

Angell, James. .... Mfr. Engines & Boilers.  
Ellis, Chas. .... Plumber & Gas Fitter.  
Gemmell, Hugh. .... Iron Founder.  
St. Johns Foundry Co.  
Wills, Jno. .... Plumber & Gas Fitter.

**MANITOBA.**

**PORTAGE LA PRAIRIE.**

Haggart Bros. Mfg. Co. .... Agl. Impts.  
Hay, E. H. & G. G. .... Machinists.  
Masey Mfg. Co. .... Agl. Impls.  
Taggart Bros. .... Machinists.

**ST. BONIFACE.**

Degagne, Alexis. .... Millwright.

**WINNEPEG.**

Adamson, J. P. .... Plumber.  
American Plumbing Co., The.  
Brydges, Fred. H. .... Vulcan Iron Works.  
Buchanan, Jno. .... Plumber.  
Douglas Bros. .... Iron.  
Goldie & McCulloch. .... Machinery.  
Horseman, A. P. .... Iron.  
McKechnie & McMillan. .... Iron Founders & Machinists.  
Moissen, J. .... Machinist.  
Nott, J. .... Plumber.  
Robinson, F. W. .... Gas Fitter.  
Stephenson & Wells. .... Plumbers.  
Williams, W. F. .... Plumber.

**PRINCE EDWARD ISLAND.**

**CHARLOTTETOWN.**

Hermans, A. & Son. .... Gas Fitters.  
McKimmion & McLean. .... Iron Founders.  
Smallwood, Robt. .... Machinist.  
Unsworth, J. .... Prince Edward Island R. R.  
White, Archibald & Son. .... Machinists.

**GEORGETOWN.**

Rutherford, Jas. A. .... Iron Founder.

**NEW GLASGOW BRIDGE.**

Gregor, Angus. .... Mfr. Agl. Impls.

**SUMMERSIDE.**

Hall Mfg. Co. .... Agl. Impls.

**BRITISH COLUMBIA.**

**NEW WESTMINSTER.**

Law, Robert. .... Iron Founder.

**VICTORIA.**

Dougall, John. .... Iron Founder.  
Godfrey, Wm. .... Boiler Maker.  
Gowan, Thos. .... Machinist.  
Marvin, Edgar. .... Iron, etc.  
Matthew, Richards & Tye. .... Iron, etc.  
Robertson, John. .... Boiler Maker.  
Shaw & Kuna. .... Machinists.  
Spratt, Joseph. .... Iron Works.  
Stewart & Braden. .... Plumbers.  
Wilson, Thos. .... Iron Founder.  
Wilson, A. & W. .... Plumbers.

**YALE.**  
McBride, James.....Coppersmith.

## NOVA SCOTIA.

**AMHERST.**  
Hodgson, T.....Machinist.  
Robb, Alexander & Sons.....Iron Founders.  
Skimming, David.....Machinist.

**AYLESFORD.**  
Chute, Foster M.....Mfr. Plows.

**BEAR RIVER.**  
Tupper, E. E.....Machinist.  
Wade, Edmund.....Millwright.

**BERWICK.**  
Pines, George.....Iron Founder.

**BRIDGETOWN.**  
Craig, W. A.....Iron Founder.

**BRIDGEWATER.**  
Hunter, Robert.....Iron Founder.

**BRULE.**  
Morrell, Wm.....Iron Founder.

**CANNING.**  
Blenkhorn & Son.....Mfrs. Axes.

**DARTMOUTH.**  
Leadley, John E.....Iron Founder.  
McRay, Adam.....Boiler Maker.  
Sarr Mfg. Co.....Machinists.  
Symonds, W. S. & Co.....Iron Founders & Boiler Makers.

**GREAR VILLAGE.**  
Londonberry Stove Works Co.

**HALIFAX.**  
Austen Bros.....R. R. Supplies.  
Douglas & Co.....Iron Founders.  
Feneity, E., Lawton & Co.....Mfrs. Skates.  
Fultz, Geo.....Brass Founder.  
Halifax Rolling Mill Co.  
Harris, Geo. J.....Plumber.  
Hillis, James.....Iron Founder.  
Howell, W. W. & Co.....Iron Founders.  
Hunter, James.....Gas Fitter.  
King, David.....Plumber.  
Kinsman & Myers.....Plumbers.  
Longard Bros.....Plumbers & Steam Fitters.  
Macdonald & Co.....Brass Founders & Plumbers.  
McRay, Adam.....Machinists' Supplies.  
Miller, Archibald.....Plumber.  
Moir, Alex. & Sons.....Machinists.  
Morrissey, John.....Plumber.  
Muirhead & Co.....Plumbers.  
Munro & Wisdom.....Iron Founders.  
Patterson, John.....Boiler Maker.  
Star Mfg. Co.....Machinists.  
Symonds, W. S. & Co., Iron Founders & Machinists.  
T' rrey, John.....Plumber.  
Wat on & Myers.....Plumbers.

**LOCKEPORT.**  
Lockeport Iron Works.

**LOWER STEWIAKKE.**  
Sibley & Co.....Iron Founders.

**MAHONE BAY.**  
MacLeod, John.....Iron Founder.  
Mahone Bay Iron Foundry.

**MAITLAND.**  
Peppard, D. C.....Iron Founder.

**NEW GLASGOW.**  
Caffrey, James & Co.....Iron Founders.  
Jones, J. B.....Halifax & Cape Breton Railway.  
Matheson, Isaac & Co.....Iron Founders & Boiler Makers.  
Nova Scotia Forge Co.....Mfrs. Car Axles.  
Stewart, Jno.....Mfr. Plows.

**NORTH SYDNEY.**  
Partridge Bros.....Iron Founders.

**OXFORD.**  
McPherson, Alex.....Machinist.

**PICTOU.**  
Davies, W. H. & Sons.....Iron Founders.  
Fullerton, John D.....Mfr. Nails.  
McKean, Howard.....Plumber.  
Munro, James.....Brass Founder.  
Narraway, H. R.....Brass Founder.

**RIVER JOHN.**  
Grant, James.....Millwright.  
Morrell Bros.....Iron Founders.

**SHEFFIELD MILLS.**  
Eaton, Benj. & Sons.....Mfrs. Edge Tools.

**STEWIAKKE.**  
Sibley, S.....Iron Founder.

**TRURO.**  
Clish, Crow & Co.....Iron Founders.  
Fields, E.....Mfr. Plows.

**VALE COLLIERY.**  
Vale Coal & Iron Mfg. Co.

**WINDSOR.**  
Windsor Foundry Co.

**YARMOUTH.**  
Burrell Johnson Iron Co.....Iron Founders & Machinists.  
Morton & Allen.....Plumbers.  
Pondrigh & Crawford.....Brass Founders.  
Wilson, Frank H. & Co.....Iron Founders.

# SOUTH AND CENTRAL AMERICA.

**METAL WORKERS, COMMISSION MERCHANTS, AND DEALERS IN  
MACHINERY, METALS, &C.**

## MEXICO.

### ACAPULCO.

#### IRON, MACHINERY, ETC.

Alzuyeta, Hermanos. Urnuela & Co.  
A. Dempwolff. J. M. Yudart.

### CITY OF MEXICO.

#### MFRS. AGRICULTURAL IMPTS.

Buerang, Gustavo.....2a de Delicias.  
Charre on, Luis.....Cadena 10.

#### FOUNDERS.

Arnand, Julio.....4a de la Providencia 1.  
Buerang, Gustavo.....2a de Delicias.  
Charreton, Hnos Luis.....3a de Revillagigedo 24.  
Poulat, Juan.....Rebeldes 19.

#### IRON, ETC.

Berthier & Hijo, T.....Flamencos.  
Bok r y Comp, Roberto.....Puente del Espirito  
Santo 4.  
Delarue, E.....2a de Plateros 1.  
Diehl y Comp.....Flamenco 1.  
Fagne, A.....Refugio, 10.  
Guthrie y Comp., Agn.....Ocampo 1.  
Gutierrez y Hno Miguel.....Puente de Palacio 11.  
Gutierrez y del Rio.....Palma 7.  
Jacot & Comp., A.....Tlapaleros 19.  
Joransson, Carlos.....3a de S. Francisco 4.  
Joula y Comp.....Lerdo y Tlapaleros.  
Lefebre, A.....Palma y Refugio.  
Lohse & Comp., Guillermo.....Palma 9, 10 y 11.  
Lohse, Santiago C.....D. Juan Manuel 4.  
Philip y Comp., Mx A.....Empedradillo 5 y 6.  
Walker, Hermanos Sucesores.....Palma 4.

#### PLUMBERS' MATERIALS.

Alfaro, Pedro.....Santa Isabel 6.  
Lavie, Antonio.....Tumbaburras.  
Memmuir, R. B.....Independencia 11.  
Patterson y Henderson, Gmo.....1a de la Provi-  
dencia 6.  
Sinclair, Vinda de.....Independencia 12.  
Turubull, Adam.....Nuevo Mexico 1.

## GUADALAJARA.

(Estado de Jalisco.)

#### IRON, ETC.

Bartholly, Augustin. Jurgensen, Julio.  
Blume, Agustin. Rohde Mauricio.

## GUAYMAS.

Alamos.

#### IRON, ETC.

Carbola, Querino. Robinson, T. Boms &  
Ortez, J. M. & Bros. Son.

Guaymas.

#### IRON, ETC.

Aguilars, F. A. Hooper, Wm. B. & Co.  
Baston, D. Selden & Von Borstel

Hermorillo.

#### IRON, ETC.

Calderon, Antonio. Pesqueira, J. J.  
Hooper, W. B. & Co. Ruiz & Inasceranos.

Magdalena.

Anderson, Jno. & Co.....Iron, etc.

## MERIDA.

(Esta to de Yucatan.)

#### IRON & COMMISSION MERCHANTS, ETC.

Alb-rto, Leopoldos. Gutierrez, R.  
Alvarez y Co. Juanes, P. Ramon.  
Azner, R. & Co. Nicolin, Hermanos.  
Craseman, Juan y Co. Ravensburg, German.  
Bondé, Manuel. Troncoso, P.  
Ensenat, Antonio. Ybana & Co.  
Gutierrez, L.

## COSTA RICA.

### SAN JOSE.

#### IRON, ETC.

Carazo, Manuel. Munoz, Jose.  
Morrell y Co.

## HONDURAS.

### TEGUCIGALPA.

#### IRON, ETC.

Ballette, Julio. Sotero, Lazo Jose.  
Reyna, José Maria. Zelaya Brothers.

## SALVADOR.

### SAN SALVADOR.

#### IRON, ETC.

Aguilar, Francisco. D'Aubuisson y Ca.  
Ballette, Julio. Dorantes y Ojeda.

## ARGENTINE REPUB- LIC.

### BUENOS AYRES.

#### GAS FIXTURES.

Barberis, Degregoria.....San Martin 139.  
Cummenter, S.....Peru 259.  
Lemonnier, Eugenio.....Cangallo 264.  
Pozzo, Gayetano.....Cerrito 171.  
Tradalta, Daniel.....Corrientes 363.

#### IRON, ETC.

Casares, Francisco L.....Peru 226.  
Clark, Juan N y Ca.....Salta 14.  
Fader y Pena .....25 de Mayo 297.  
Gocheneix y Menditeguy.....Chacabuco 175.  
Ingwersen, E.....Rivadavia 587.  
Mantier, Francisco.....Cuyo 856.  
Rivolta, Carboni y Ca.....Venezuela 347.

#### IRON FOUNDERS.

Armonini, Luis y Ca.....Vic'oria 708.  
Bechegaray y Curutchet.....Entre Rios 457 y 459.  
Casan, Fernando.....Salta 113.  
Cavana, Mateo.....Buen Orden 358.  
Chilonce Federico.....Tucuman 1003.  
Herinz, Isabel.....Garantias 188.  
Huerta, J. de la.....Montevideo 426.  
Landi, Miguel P.....De Julio 188.  
Montorino, Luis.....Entre Rios 484.  
Ocampo, Mateo.....Montevideo 413.  
Pena y Fader P.....De Julio 364.  
Pena, Enrique.....Piedad 278.  
Schwarz, Felipe y Hnos.....General Brown 38.

#### MACHINERY.

Astice, Rerni.....Bolivar 441.  
Cayol y Neuman.....Cuyo 211.  
Chione, Marcos.....Suipacha 172.  
Chope, Francisco.....Venezu la 542.  
Duncan, Carlos.....Balcarne 190.  
Espoil y Ca.....Buen Orden 242.  
Fontano, Hnos.....Piedad 25.

**BUENOS AYRES—Continued.**

Gasquet, Pablo.....	Salta 399.
Lea, Tomás.....	Balcarce 118.
Marti, F.....	Rivadavia.
Mawenet, L. M. y. Ca.....	Piedad 138.
Mastre Alejandro.....	Buen Orden 107.
Pena, Enrique.....	Piedad 278.
Petit, C.....	Sulpacha 2.
Pozzo Cayetano.....	Cerrito 171.
Reinaud, A.....	Chacabuco 174.
Villafane Gregoria.....	Rivadavia 301 y. 305.
Zamboni, Silvestre.....	Charcas 481.

**SCALE MANUFACTURERS.**

Bonaccio Bianchetti, y. Hnos.....	San Martin 214.
Sala Patricio.....	Chile 78.
Salas Gregoria M. de.....	Defensa 327.
Soresina Cesario.....	Defensa 267.

**BELGRANO.****COMMISSION MERCHANT.**

Huergo Portemani.....	Sulpacha 120.
-----------------------	---------------

**BRAZIL.****RIO DE JANEIRO.****COMMISSION MERCHANTS.**

W. B. Demming.....	W. R. Cassels & Co.
--------------------	---------------------

**MANUFACTURERS OF MACHINERY, ETC.**

A. da Rocha Papos.....	Ledgerwood & Co.
A. G. de Mattos & Co.	Lopes & Pacheco.
Algría & Co.	M. S. Corcao.
Areno Irmaos.	R. Conterville.
Houchoud & Sobinho.	Rohe, Irmaos.
Frederico Vierling & Co.	Van Erven & Irmaos.
Hargreaves Irmaos.	

**METAL AND MACHINERY DEALERS.**

A. da Rocha Papos.....	Joaquim do Costa Araujo
A. G. de Mattos.	Junior.
Alegria & Co.	Lenoir Filhoes.
Arens Irmaos.	Lidgerwood & Co.
Bouchaud & Sobinho.	Lopes & Pacheco.
Costa Ferreira & Co.	M. L. Corcao.
F. Grauekt.	Maximiliano Nothmann
Francisco Cannivoda	Pedro Rougert.
Costa.	R. Conterville.
Frederico Vierling & Co.	Rohe Irmaos.
Hargreaves Irmaos.	Silva & Co.
Henry Delforge.	Van Erven & Irmaos.
Joao Baptista Ienard.	

**PROVINCIA DO RIO DE JANEIRO.****MUNICIPIO DE CAMPOS.**

(Freguezia de S. Salvador Icidade de Campos dos Goytacazes)

**FOUNDERS.**

Janot, Irmao & Chrysostomo.
Reyd & Noble.
Torres, Tilho & C.

**MACHINISTS**

Antonio, Zulchnett.
Janot, Irmao & Chrysostomo.
Torres, Tilho & C.

**MUNICIPIO DE NITHEROY.**

Freguezia S. Joao Baptista de Icarahy.

Companhia Ponta d'Area.....Founder.

**IRON, ETC.**

Coste & C
Machado, Guimaraes & C.
Marcos Tito Alvaras de Andrade & C.
Ribeiro & Guimaraes.

**PROVINCIA DE PARA.****IRON FOUNDRIES & MACHINERY.**

A. Kingdom & C.....	r. de S. Antonio.
Campanhia de Navegacao a Vapor d Amazonas	r. de S. Antonio.
Guilherme, Fox Junios.....	trav. da Princeza.
Guilherme, James Wilson.....	r. do Espirito Santo.

**PROVINCIA DE PARAHYBA.****IRON, ETC.**

Antonio Joaquim Teixeira.
Jocinho, Pedro Mello.
Viuva de Francisco Jorge Martins Botelho.

**PROVINCIA DE PERNAMBUCO.****ENGINEERS & MACHINISTS.**

Francisco C. de M. Cardoso.....	r. B. do M. Triumpho 100
Jorge, Brain.....	r. B. Triumpho 104.

**GAS FIXTURES.**

Companhia do Gaz.....	r. do Imperador 41.
Joao Jose Alves Guimoraes.....	r. do Imperador 31.

**IRON, ETC.**

Almeida Vianna & C.....	r. do Barao da Victoria, 20.
Antonio da Fonseca e Silva.....	r. Duque de Caxias 72.
Antonio dos Santos Oliveira.....	r. do Barao da Victoria 6.
Antonio Roiz de Souza & C.....	r. Duque de Caxias 78.
Ferreira Guimaraes & C.....	r. Duque de Caxias, 115.
Fortunato Ribairo Bastos.....	r. do Barao da Victoria 61.
Joao C. Bastos de Oliveira.....	r. do Marquez de Olinda 56.
Joaquim Luiz Machado & C.....	r. Duque de Caxias 50.
Jose Antonio de Souza & C.....	r. do Barao da Victoria 61.
José dos Santos Oliveira.....	r. Duque de Caxias 70.
José dos Santos Natividade.....	r. Duque de Caxias 74.
José Victor de Souza Pimental.....	r. da Imperatriz 44.
Manoel Roiz da Silva.....	r. Duque de Caxias.
Manoel Roiz Costa Magalhaes.....	r. Duque de Caxias 46.
Miranda & Souza.....	r. do Marquez de Olinda 66.
Silva Alves.....	r. do Marquez de Olinda 66.
Silva Azevedo & Co.....	r. Duque de Caxias 56.
Thomaz Ferreira d.....	Cunha.....r. do Marquez de Olinda 44.
Vianna Castro & C.....	r. Duque de Caxias 115.

**PROVINCIA DE S. PAULO.****GAS FIXTURES.**

Afonseca & C.....	r. do Ouvidor 17.
Companhia do Gaz.....	r. do Imperatriz 2.

**FOUNDERS.**

Eduardo, Frank.....	r. 25 de Marco 12.
Gustavo Sydon & C.....	r. do Barao de Itapetininga.
Herbert K. Holland.....	r. da Estacao da Luz.

**SANTOS.****IRON, ETC.**

Antonio Páes da Costa.	Ferreira de Souza & Peixoto
Braga, Junior &c.	Monteiro & C.
Ferreira de Souza &c.	Theodor, Wille & Co.
Ferreira de Souza & Ir-	Zerrenner, Bülow & Co.
mao.	

**SAS PAULO.****IRON, ETC.**

Bruhns & Co.	Paranhos & Co.
Carvalho & Filho.	Peixote, Estella & Co.
Correia, Sampaio, Filho	Rempe & Co.
& Co.	Samuel & Prado.
Lebre, Irmao & Sampaui.	Victor Northmann.

**CAMPINAS.****IRON, ETC.**

Calhelha & Filhos. Santos, Irmao & Nogueira  
 Pe-tro, Anderson. Viuva Conto & Filho.  
 Pinto, Gomez & Cardozo.

**MACHINERY.**

Guilherme, McHardy & Co.  
 Lidgerwood Mfg. Co.

**PROVINCIA DO RIO GRANDE DO SUL.****FOUNDERS & MACHINISTS.**

A. Euglert.....r. Santa Catharina.  
 Becker & Irmao.....r. dos Voluntarios da Patria.  
 F. L. Nielsen.....r. do Caminho Novo.  
 Kupplich & Co.....r. da Conceicao.  
 So & Co.....r. 7 de Setembro.

**IRON, ETC.**

Bier & Fnet.....r. 7 de Setembro  
 Francisco, H. Friedrich's.....r. de Braganca.  
 Jacob, Rech & Co.....r. 7 de Setembro.  
 Joaquim Ramos da Rocha.....r. 7 de Setembro.  
 José, Gomes Pinto.....r. de Braganca.  
 José, Guimaraes Pinto da Fonseca & Co.....r. dos Andradas.

Manoel, Francisco Moreira.....r. dos Andradas.  
 Manoel Roiz Vianna.....r. de Braganca.  
 Ribeiro & C.....r. dos Andradas.  
 Silva, Bastos & C.....r. 7 de Setembro.  
 Warucke & Dorken.....r. de Paraiso.

**RIO GRANDE DO SUL.****FOUNDERS AND MACHINISTS.**

Antonio, Lopes, Valente & Co.....Praca Municipal.  
 Clemente, Irmaos.....r. do Riachuelo.  
 Dias & Almeida.....r. N. Formosa.  
 L. F. Santos.....r. do Riachuelo.  
 Salustiano Izaguirre.....Praca Municipal.

**IRON, ETC.**

Costa, Ferreira & Co.....r. de D. Pedro 11.  
 Gomes, Magrico & Co.....r. de D. Pedro 11.  
 Marques & Filhos.....r. dos Príncipes.  
 Pinto & Co.....r. de D. Pedro 11.

**PELOTAS.****IRON, ETC.**

Castro, Silva & C.....r. de S. Miguel  
 Concelas & C.....r. de S. Miguel.  
 Ernesto & Sequeira.....r. de S. Miguel.  
 Lopes, Lima & C.....r. do Barao do Triumpho.  
 Manoel, Lopes de Sequeira.....r. de S. Miguel.  
 Nova & Carvalho.....r. de Andrade Neves.  
 Rech & C.....r. de Setembro.

**PROVINCIA DE BAHIA.****COPPERSMITHS.**

Joaquim Francisco de Souza Guimaraes.....r. do Julio 14.  
 Manoel de Vargas Leal.....r. do Julio 23.  
 Porphirio & Irmao.....r. do Julio 24.

**IRON, ETC.**

Antonio Luiz Vieira Lima.....r. dos Droguistas 43.  
 A. Martins de Azevedo Junior.....r. dos Droguistas, 48.  
 A. Alves Fernandes.....r. Nova do Commercio 12.  
 Antonio Pinto Monteiro & C.....r. dos Ourives 16.  
 Barbosa & C.....r. Nova do Commercio 40.  
 Francisco, Adoes Villasboas.....r. Nova do Commercio 40.  
 Gama & Silva.....r. do G. dos Padres 33.  
 Gadinho & C.....r. dos Droguistas 37.  
 Neves & Marca.....r. do G. dos Padres 22.  
 Santos & Padra.....r. do G. dos Padres 21.

**PROVINCIA DAS ALAGOAS.****IRON, ETC.**

Antonio Bento da Silva Coelho.....r. do Commercio 124.  
 Antonio Pereira Caldas.....r. do Commercio 102.  
 Francisco Joaquim da Trindade.....r. do Commercio 118.

**PROVINCIA DA SALAGOAS—Continued**

Francisco Xavier de Souza Carneiro.....r. do Commercio 107.  
 Josefino Martins da Costa.....r. do Commercio 16 A.  
 Jacintho José Nunes Leite.....r. do Commercio 108.  
 Manoel Gomes d'Almeida Leite.....r. do Commercio 108.  
 Vicente Bezerra Montenegro.....r. do Commercio 150.  
 Viuva Teixeira Pinto & Filho, r. do Commercio 79.

**PROVINCIA DE MARANHÃO.**

*Capital City S. Luiz Do Maranhão.*

**IRON, ETC.**

Antonio Ferreira Vianna.....r. 28 de Julho.  
 Domingos Belchior & C.....r. 28 de Julho.  
 José da Cunha Santos & Filho.....r. do Trapiche.  
 Oliveira Sobrinho & Goncalves.....r. do Trapiche.  
 Pixoto Dias & C.....r. do Estrella.  
 Rodrigues & C.....r. do Trapiche.

**CHILI.****VALPARAISO.****FOUNDERS.**

Baester, Otto.....Victoria 327.  
 Brower, A. C.....Delicias 107.

**IRON, ETC.**

Fernandez Ventura.....Victoria 422.  
 Johnson & Ca.....Aduana 30.  
 Zurcher y Ca.....Aduana 62.

**MACHINERY, ETC.**

Clark y Ca.....Teatro 71.

**CONCEPCION.**

Castro, J. Maria i Ca.....Iron, etc.

**COPIAPO.**

Pepper i Ca.....Iron, etc.

**COLOMBIA.****BOGOTA.**

*(State of Cundinamarca.)*

**FOUNDERS.**

Bunch, Jorge, Manrique y Codazi.  
 Fundicion de Samaca.

**MACHINERY, ETC.**

Calleja, J. M. Sacs. Pereira, Gamba y Ca.  
 Paris, Rafael N. Piedrahita, D.

**PANAMA.**

*(State of Panama.)*

Lyons, Emanuel.....Iron, etc.

**SABANILLA.****COMMISSION MERCHANTS.**

Alpli Eberbach & Co. J. M. Sougalez & Co.  
 Ferguson & Noguera. Wolff & Co.  
 Helm & Co.....Iron, etc.

**ECUADOR.****GUAYAQUIL.****IRON, ETC.**

Bergeot, Eugenio. Hurtado, Antonio y Ca.  
 Henriques, E. H. y Ca. Medina, Damian J.

**PERU.****LIMA.****BOILER MAKERS, COPPERSMITHS, ETC.**

Cancelo, Mauricio.....223 Marañon  
 Claverini, Pablo.....10 Lambayeque

**LIMA-Continued.**

Danzere, Gustavo y Ca	150 Junin
Julia, Juan & Hijo	172 Huallaga
Louveau y Lannois A.	177 Carabaya
Roncal, Ruperto	33 Ilo
Smith, Carlos	18 Catamarca

**FOUNDERS.**

Archenholz, Enrique	46 Cayllbina.
Asc-y, Eduardo	261 Marañon.
Leuthrean, Gabriel	94 Quilca.
Lopez, Mariano	90 Cangallo.
Rios, Ramon	219 Puno.
Rivera, Manuel	115 Cayllonia.
Rossi, Nicolas	47 Cangallo.
Rumrill, J.	240 Lamp.
Schoefield, Hermanos	79 Quilca.
White, Juan	115 Cajamarca.

**IRON, ETC.**

Balbuena, Augustin	285 Huallaga.
Barrios, Evaristo	81 Junin.
Bieytes, Eduardo	39 Carabaya.
Bour-et, A. y Ca.	58 Huancavelica.
Crosby y Ca.	67 Carabaya.
Davis Bros.	70 Huallaga.
Degludt, G. y Ca.	12 Huancavelica.
Dockendorff y Ca.	30 Carabaya.
Dondey y Glaesseyen	34 Lima.
Duhn, Adolfo	16 Callao.
Fernandez, Luis	28 Junin.
Figueroa, Juan B.	65 Carabaya.
Guttman y Ca	21 Junin.
Humphrys, E. y Ca.	62 Carabaya.
Ledent y Ca.	94 Huallaga.
Magello, Domingo	3 Junin.
Masias, Francisco	55 Carabaya.
Mindreau, Francisco J.	9 Junin.
Morero, Manuel T.	2 Ancash.
Palma, Bartolomé	235 Pura.
Petitjean, Vinda de	86 Quilca.
Rivas, Manuel	34 Junin.
Sal y Rosas y Ca.	50 Junin.
Seijas, José	77 Union.
Varela, José	265 Huallaga.

**GAS FIXTURES.**

Dockendorff y Ca.	34 Carabaya.
Ferrand, Pedro	293 Huallaga.
Green, E. M.	1 Union.
Grundel, M. y Ca.	111 Carabaya.
Naranjo, Benjamin	175 Camana.

**PLUMBERS.**

Albites, José B.	198 Caylloma.
Arquez, Juan	238 Ayacucho.
Cabassa, Juan V.	Urubamba.
Castro, Simon	69 Quilca.
Chavez, Felix	163 Azangaro.
Deunna, Andres	191 Huanta.
Espinosa, Juan de Dios	194 Puno.
Galla, Juan	7 Moquegua.
Grueso, Bernardo	87 Sandia.
Hart, Hermanos	148 Huallaga.
Henriquez, Luiz	118 Camana.
Herouard, G. y Ca.	157 Huallaga.
Hesmit, Juan	44 Paruro.
Kart, James	191 Huanta.
Kemish y Melson	56 Camana.
Larranaga, Jose	20 Parus.
Loy, Manuel	176 Cajamarca.
Matas, Manuel	Urubamba.
Morera, Justo	88 Tayaca.
Morera, Francisco	268 Huancavelica.
Moss, A. y Co.	135 Union.
Pena, Juan	113 Libertad.
Puga, Melchor	98 Junin.
Ramirez, Manuel	14 Arequipa.
Rodriguez, Bernardo	354 Ayacucho.
Rodriguez, Juan	254 Ayacucho.
Rojas, Alejandro	34 Cuzco.
Sanchez, Juan	4 Ilo.
Scott y Chambres	54 Ica.
Smith, W. y Scherpe	114 Caylloma.
Soto, Juan del Carmen	15 Moquegua.
Torres, Gabriel	122 Camana.
Torres, Jose S.	22 Sechura.
White, David	244 Camana.
Zevallos, Belisario	128 Junin.

**CALLAO.****FOUNDERS.**

Cock y Ca.	24 Chucuito.
De Coursey y Ca.	22 Chucuito.
Heaton Cree y Kerr	Chucuito.
Schofield, Hermanos	San Jacinto.
Stuart y Swallow	6 Ucayali.

**IRON, ETC.**

Barrios, Evaristo	11 Libertad.
Beausire, Roberto	14 Libertad.
Dartnell, E. C.	4 Constitucion.
Mencha y Ca	82 Constitucion.

**PLUMBERS AND GAS FITTERS.**

Smith, John	Galvez.
Taylor y Mackintosh	48 Constitucion.
Viuda de McKinlay	Figura.

**URUGUAY.****MONTEVIDEO.****MFRS BRASS WORK.**

Alverti, Ignacio y Ca.	43 Treinta y Tres.
Castellanos, Nicolas	72 Perez Castellanos.
Cassagnere, Hermanos	276 A. Buenos Aires.
Dulcino, José	134 Calle 25 de Agosto.
Fuentes, Antonio y Ca.	11 Colon.
Piazza, Benvenuto	54 Perez Castellanos.
Violarte, Benjamin	197 Uruguay.

**FOUNDERS.**

Capra, Juan	27 Zabala.
Castella y Ca.	193 Reconquista.
Guaveira, Luis	270 Cerro.
Reventos y Berch	286 Corrito.
Sala Joaquin y Ca.	318 Piedras.

**MACHINERY.**

Estrada, Angel	185 Itzaingiro.
Lipran I, Carlos	11 Soriano.
Mackinnon, Jno. H.	190 Calle 25 de Mayo.

**VENEZUELA.****CARACAS.****IRON, ETC.**

Avista, W.	Marquez, Pedro.
Bainbridge, K. A. y Ca	Marturet, Hermanos
Boggio, Yanes y Ca.	y Ca.
Boulton, H. L. y Ca.	Neuvill, C.
Casas, Hermanos.	Nevet y Ca.
Dubois, C.	Nunez y Alvarado.
Duvall, A. y Ca.	Perez, Hermanos y Ca.
Escobar y Ca.	Perez, Miguel G.
Fleury, Alex. y Ca.	Peyer, F. y Ca.
Francia, F.	Ramirez, Hermanos.
Friede, Adolfo.	Rauber, E. y Ca.
Fox, Emilio.	Rey, Pablo y Ca.
Fullie y Ca.	Rivodon, Rivero y Ca.
Guido, Francescom.	Rodriguez, Fermin A.
Hellmund, C. y Ca.	y Ca.
Hurtado, Tresselt y Ca.	Rothe, Erass y Ca.
Izquierdo y Ca.	Santana Bros. y Ca.
Jacquin, Emilio.	Sanchez, Andres y Ca.
Jahn, Alfredo.	Serizier, A. y Ca.
Jarren, L. y Ca.	Sigond & Forsyth.
Le-seur, Romer y Ca.	Toledo, R.
Manson y Ca.	

**LAGUAYRA.****IRON, ETC.**

Dalto, C.	L. F. Garcia Correa.
Hernandez, M.	Mallory, G.

**MARACAIBO.**

Schmilinsky & Co.	Iron, etc.
-------------------	------------

**PUERTO CABELLO.****IRON, ETC.**

Marturet, Hermanos y	Poly y Ca.
Ca.	Seldel, L. y Ca.
Nierro, Funchon	Iron Founder.



**VALENCIA.****IRON, ETC.**

Graux, Antony.	Panganon & Ca.
Latarone y Ca.	Paz, Tomas.
Martínez, G. y Ca.	Sidel & Ca.
Mestern A. y Ca.	Tarbes, B.
Minguet y Letteron.	
Winkleman & Ca.	Iron Founders.

**WEST INDIES.****ISLAND OF ANTIGUA.***St. John.***IRON, ETC.**

Coltart, A. Co.	Fernandez, J.
Comache & Sons.	Forre-t, W. & Co.
Dougall, Wm.	Hornel, David.

**PLUMBERS' MATERIALS.**

Dash, Richard,	Marín, Robt.
Gray, Wm.	Scotland, Robert J.

**BAHAMA ISLANDS.***Nassau.***IRON, ETC.**

Bethel, B. W. & Co.	Bay St.
George, John S.	Bay St.
Rigby, R. E. & Co.	Bay St.
Weech, W. J. & Son.	Bay St.

**ISLAND OF BARBADOS.***Bridgetown.*

Blackwood, John.	Founder.
------------------	----------

**IRON, ETC.**

Carter & Co.	Herbert, Thomas.
Field & Simpson.	Hutchinson, G. W. & Co.
Harrison, C. F. & Co.	King, Henry A.

**BERMUDA ISLANDS.***Hamilton.***IRON, ETC.**

Black, Wm.	Front St.
Darrell, R. J. P.	Front St.
Hodsdon, A. J.	2 Front St. W.
Hughes, W. H.	34 Front St.
Masters, J.	26 Front St.
Se n, D. E.	40 Front St.
Tucker, T. F. J.	Front St.

**PLUMBERS.**

Atwood, R.	Parliament St.
Basil, John.	Albuoy's Point.
Grote & Hollis.	Parliament St.

**SAINT GEORGE.****IRON, ETC.**

McCallan, R. C.	Water St.
McCallan, N.	Water St.
Musson, A. J.	Water St.
Wainwright, T. M.	Water St.

**ISLAND OF CUBA.***Havana.***COPPERSMITHS.**

Alfaro Matias.	150 Ppe. Alfonso.
Bentley y Chiapero.	Regia.
Falber, Franco.	244 Ppe. Alfonso.
Orbea, Juan José.	7 Vedado.
Raboso Antonio.	35 Real Mariano.
Sabino Rafael.	125 Monserrate.

**FOUNDERS.**

Bartolot, Tomas J.	36 Peregrino.
Escobar y Cisneros.	63 San Isidro.

**HAVANA—Continued.**

Madurell, José.	135 Vioes.
Orbea, Juan José.	7 Vedado.
Souville, Francisco A., herederos de Maria.	26 Regia.
Tomati, herederos de Ambrosio.	Industria y 8 Virundes.
Van de Wat-r y Ca.	99 Ancha del Norte.
Zulueta y Sobr.no	Casa Blanca.

**MACHINERY.**

Ca'll y Ca.	13 San Ignacio.
Carriaburn, Nicasio.	22 Lamparilla.
Chapman, W. V.	46 San Ignacio.
Hyatt, Jorge W.	23 Cuba.
Lyles y Gison.	76 Cul'a.
Mourgue, E.	54 San Ignacio.
Pascual, Enrique.	90 Cuba.
Smith, Sa. tino.	98 Cuba.

**GAS FIXTURES, ETC.**

Alfonseca, Pedro.	95 Lealtad.
Antunen, Dionisio.	6 Romay.
Balvira, Manuel.	100 Obi-po.
Caballero, Francisco.	39 Concordia.
García y Sanz.	105 Neptuno.
García, Pio.	495 Ppe. Alfonso.
Gill, Antonio.	99 Neptuno.
Gonzalez Rosario y Rodriguez.	615 C. del Cerro.
Lopez y Alvarez.	55 Bernaza.
Marquez, Manuel.	50 Dragones.
Matino, Enrique M.	49 Aguiar.
Papiol, José.	71 O'Reilly.
Pardinas, José A.	44 Compostela.
Pariagua, Juan.	238 Ppe. Alfonso.
Portas José.	26 San Rafael.
Ramirez Andres Pedro.	75 Amistad.
Ruffin, Dolores.	79 O'Reilly.
Subirana, Sebastian.	40 Teniente Rey.
Valverde, Manuel C.	66 Empedrado.
Weeks, Carlos P.	90 O'Reilly.

**BATABANO.***(Province of Habana.)***IRON, ETC.**

Horta Gaspar	4 Real.
Jaime, Maria Francisco.	Martínus Campo.
Rivas, Joaquin.	
Ruiz, Manuel.	8 Sta. Isabel.

**CAIBAIEN.***(Province of Santa Clara.)***FOUNDERS, ETC.**

Adams, Matilde.	Comercio.
Ciré, Mariano.	Marina.
García, Ramon.	Comercio.
Guell, Ramon.	Comercio.
Howard, Jeremiah.	Egidos.
Reguera, Gregorio.	Real.
Tome, A. y Ca.	Iron, &c.

**CARDENAS.***(Province of Matanzas)***COPPERSMITHS, FOUNDERS, ETC.**

Alayo, Juan F.	114 Ayllon.
Alvarez, F. y Rico.	70 Calvo.
Benito, Ramon.	20 Ayllon.
Chaleco, J. y San Martin.	198 O'Donnell.
Corzo de Alvarez Juana.	96 Princesa.
La de la Empresa del Ferro-carril Labourdette y Ca.	Obispo.
Petit, Fernando.	169 Real.

**CEJA DE PABLO.***(Province of Santa Clara.)***FOUNDERS, IRON, ETC.**

Achin, Santiago.	Corralillo.
Astoy, Leon y Ca.	Santa Barbara.
Chavi, Saturnino.	Corralillo.
Gibert, Alejandro.	Sierra Morena.
Leundra, Antonio.	Corralillo.
Portilla y Abreu.	Sierra Morena.
Stuar, Agustin.	Corralillo.

**CIENFUEGOS.***(Province of Santa Clara.)***FOUNDERS, ETC.**

Aguero, Bonifacio.....	Tacon.
Calderon, Felix.....	Arguelles.
Clark, Diego D. G.....	Santa Clara.
Eschemendia, Bernardo.....	Plaza de Vives.
Gonzalez, F. y Gonzalez.....	Calzada de Dolores.
Longoria, Antonia.....	Cuartel.
Marquez y Artigas.....	Vives.
Martinez, Serafin.....	Cristina.
Mill, José.....	Dorticos.
Peltier, Luis.....	Dolores.
Rios, Emilio.....	Castillo.
Veguilla, José y Ca.....	Castillo.

**COPPERSMITHS.**

Panza, B. y Maimon.....	Castillo.
Schittino, Nicolas.....	Castillo.

**GUANABACOA.***(Province of Habana.)***IRON, ETC.**

Alio, Serafin.....	42 Pepe Antonio.
Arronte, Baltasar.....	Versalles.

**GUANAJAY.***(Province of Pinar del Rio.)***FOUNDERS, ETC.**

Fernandez, Julian.....	San Hilarion.
Fernandez, Ramon.....	San Rafael.
Fuente, Ignacio.....	San Hilarion.
Garrido, Ugarre y Ca.....	Contreras.
Hernandez, Florencio.....	San Hilarion.
Hernandez, Rufino.....	San Hilarion.
Hernandez, Telefon.....	San Rafael.
Lamoglia, Antonio.....	San Rafael.
Monet, Andres.....	San Ra ael.

**HOLGUIN.***(Province of Santiago de Cuba.)*

Trefas, Franco.....	Iron, etc.
---------------------	------------

**MANZANILLO.***(Province of Santiago de Cuba.)***IRON, ETC.**

Riera, A. y Ca.....	56 Santa Ana.
Roca, Vivas Hermano.....	20 San Pedro.
Treserra y Ferrer.....	San Pedro.

**MATANZAS.***(Province of Matanzas.)***COPPERSMITHS.**

Dios, Rafael de.....	63 San Francisco.
Labarrere, Dominique.....	18 Tirry.
Llamane y Ca.....	20 Tirry.
Ollacarrisqueta y Escharry.....	1 San Juan.
Roque, Juan.....	1 Tirry.

**FOUNDERS.**

Coll, Joaquin.....	Tirry.
Hughes, C. y Ca.....	13 Tirry.
Mascorieta, M.....	9 Cuba.
Prat, Tomas.....	75 Santa Ter-sa.
Sands, David y Ca.....	14 Tirry.

**IRON, ETC.**

Bea, Bellido y Ca.....	17 Riela.
Campo y Ca.....	13 Gelabert.
Labayen, Viuda de y Alvarez.....	28 Gelabert.
Samperio y Ca.....	117 Riela.
Tome, Juan.....	106 Riela.
Torres, Antonio.....	128 Riela.
Zabala, J. y Ca.....	13 Riela.

**MACHINERY.**

Clark, J. M.....	49 O'Reilly.
------------------	--------------

**PUERTO PRINCIPE.***(Province of Puerto Principe.)***IRON, ETC.**

Castello, Meliton.....	Candelaria.
Corejuela y Ca.....	5 Comercio.
Garcia, E. y Ca.....	19 Soledad.
Gonzalez, Marsella y Ca.....	58 Reina.
Marti y Pages.....	21 Candelaria.
Obregon y Ca.....	2 San Ignacio.
Rodriguez, Jose y Hermano.....	18 Comercio.
Valez, Silverio.....	22 Comercio.

**REGLA.***(Province of Habana.)***COPPERSMITH.**

Sanchez del Arco, Antonio.....	Botes.
--------------------------------	--------

**FOUNDER.**

Sauvalle, Julio.....	27 San Telmo.
----------------------	---------------

**IRON, ETC.**

Balicon y Cajigas.....	Real.
------------------------	-------

**SAGUA LA GRANDE.***(Province of Santa Clara.)***FOUNDER.**

Bustillo y Ca.....	Colon.
--------------------	--------

**IRON, ETC.**

Carbonell Pedro.....	15 Estrella.
Espinosa Moribona y Ca.,.....	26 Gloria.
Lopez y Castillo.....	52 Gloria.

**SAN JUAN DE LOS REMEDIOS.***(Province of Santa Clara.)***IRON, ETC.**

Gomez José Maria.....	26 Mercaderes.
Gonzalez José y Sobrino P. de Armas.....	
Villa Hermano y Ca.....	3 Gutierrez.

**SANTA CLARA.***(Province of Santa Clara.)***IRON, ETC.**

Bengoechea Miguel.....	6 Colon.
Sarría Antonia Maria.....	Calvario.

**SANTIAGO DE CUBA.***(Province of Santiago De Cuba.)***IRON, ETC.**

Belaguer y Ca.....	38 Mariana.
Besier Hipelito.....	11 Mariana.
Camps Baudilio.....	32 Gallo.
Castaner y Ma.....	12 San Francisco.
Ferrer Casimero.....	4 Calvario.
Llovet J. y Ca.....	2 San Francisco.
Marquez Hermanos y Ca.....	29 Mariana.
Via Inglada P. y Ca.....	3 Gallo.

**TRINIDAD.***(Province of Santa Clara.)***COPPERSMITHS.**

Chezarrino José.....	Gutierrez.
Echitino Daniel.....	Carmen.

**IRON, ETC.**

Aldecoa Rubies y Ca.....	Desengano.
Gonzalez y Ca.....	Jesus Maria.

**ISLAND OF CURACAO.****CURACAO.****IRON, ETC.**

Bethencourt A. & Hijos. Jones, J. & H.	
Capriles, M.....	Mendez & Pinedo.
De Lima, S. A.....	Nouel, G. A.
Ellis & Dania.....	Osorio, J. H.
Gorsira, N.....	

**ISLAND OF JAMAICA.****KINGSTON.****FOUNDERS.**

Lazarus & Co., Charles P.....	183 Harbour.
Lewis, W. H.....	171 & 173 Harbour.

**KINGSTON—Continued.****IRON, ETC.**

Baines, Geo. A.	52 Port Royal.
Brass & Son, John	97 Harbour.
Buscoe Bros.	155 & 157 Harbour.
Burke, Milo John	14 King.
Ford Bros.	136 Harbour.
Hecks, John	117 Harbour.
Jones, W. D. & Co.	18 Harbour.
Lyons & Son, Emannel	Harbour cor. King.
Malabre & Co., Arnold L.	48 Port Royal.
Nethersole & Nephew, W. A.	123 Water Lane.

**SPANISH TOWN.****IRON, ETC.**

Barrow & Co., H.	Adelaide cor. French.
Manahan, T. B.	Adelaide cor. Young.

**ISLAND OF PUERTO RICO.***San Juan De Puerto Rico.***IRON, ETC.**

Audiffred C. y Ca.	Sainz Miguel y Ca.
Bermudez, José.	Simonet Hermanos.
Cabrera, Pedro e Hijo.	Ubarri, Pablo.
Montel, Julio.	Vasquez, Alvaro.
Portilla, Ramon.	

**ISLAND OF ST. THOMAS.***St. Thomas.***IRON, ETC.**

Briscoe, McDougal & Co.	Cameron & Co.
Levi, Joseph & Sons.	

**GUIANA (BRITISH).***Georgetown (Demarara).***COPPERSMITHS.**

Barry, Richard	Robb St.
Burgess, James H.	Robb St.
Hope, Charles	Broad St.
Hunter, Anthony	Charlestown, High St.
Hunter, James	Princess St.
Roberts, S. A.	Croal St.
Spaman, Isaac	Croal St.
Walters, J. McL.	Brickdam.

**FOUNDERS.**

Buchanan, R. & Co.	Demerara.
Railway Foundry.	
Sproston Dock & Foundry Co.	Charlestown.

**IRON, ETC.**

Booker, Brothers & Co.	Water St.
Da Silva Augustinho, R.	Water St.
Da Silva & Goviea	Water St.
Folkhard, McLean & Co.	Water St.
Goncalves, Jose	Water St.
Little, George & Co.	Water St.
Pasley, Templeton & Co.	Water St.
Russell & Blair	Water St.
Smith, A. J.	Water St.

**NEW AMSTERDAM.****COPPERSMITHS.**

Green, T.	Stewart, Jacob.	Vliss, T.
Wreford & Co., Iron, etc.	Water St.	

**U. S. CONSULS****OF SOUTH AND CENTRAL AMERICA.****ARGENTINE REPUBLIC.**

Buenos Ayres	Edward L. Baker.
Rosario	Alanson S. Hall.

**BRAZIL.**

Bahia	Asa C. Prindle.
Para	Edward Backus.
Pernambuco	Henry L. Atherton.
Rio de Janeiro	Thomas Adamson.
Santos	Wm. T. Wright.

**CHILI.**

Talcahuano	Jno. F. Van Ingen.
Valparaiso	Lucius H. Foote.

**COLUMBIA.**

Aspinwall, or Colon	James Thorington.
Cartagena	Edmund W. P. Smith.
Panama	John M. Wilson.
Sabanilla	Wm. W. Randall.

**ECUADOR.**

Guayaquil.

**HAYTI.**

Cape Haytien.....Stanislaus Goutier.

**HONDURAS.**

Ruatán &amp; Truxillo.....Wm. C. Burchard.

**MEXICO.**

Acapulco	Jno. A. Suter, Jr.
Guaymas	Alex. Willard.
Matamoras	Warner P. Sutton.
Mazatlan	Edw. G. Kelton.
Merida	Louis H. Ayme.
Mexico	David H. Strother, C. G.
Nuevo Laredo	John F. Jenne.
Santa Cruz Pt.	Wm. Chamberlin.
Tampico	Aug. J. Cassard.
Tuxpan	W. L. Catlin.
Vera Cruz	S. T. Trowbridge.

**NICARAGUA.**

San Juan del Norte and Punta Arenas	J. C. Kretschmar, C. A.
-------------------------------------	-------------------------

**PERU.**

Callao	Jesse H. Moore.
--------	-----------------

**SAN DOMINGO.**

San Domingo	Paul Jones.
-------------	-------------

**URUGUAY.**

Montevideo	Alex. L. Russell.
------------	-------------------

**VENEZUELA.**

Laguayra	Winfield S. Bird.
Maracaibo	E. H. Plumacker.
Puerto Cabello	A. Lacombe.

# CLASSIFIED DIRECTORY.

OR INDEX TO THE PRINCIPAL FIRMS IN THE UNITED STATES, WHO  
MANUFACTURE MATERIALS, MACHINERY, AND SUPPLIES,  
ETC., USED BY THE METAL WORKING TRADES.

## ADJUSTABLE DRILLING MACHINERY.

ADT, JOHN.....22 Artisan St., New Haven, Conn.  
[see p. xxxiii.]

## \* AGRICULTURAL IMPLEMENTS.

Caulkins, T. P.....Thornville, Mich.  
Girdwood & McLellan.....Asheville, N. C.  
Janesville Machine Co.....Janesville, Wis.  
NORTH WESTERN MNFG. & CAR CO.....Still-  
water, Minn.  
Williams, Chas.....Jackson, Mich.

## AIR BUFFERS.

CROUCH, WESLEY.....108 E. Maine.  
Rochester, N.Y. [see p. iii.]

## AIR COMPRESSORS.

Clayton Steam Pump Works.....14 & 16 Water St.,  
Brooklyn, N. Y.  
Delamater Iron Works.....ft. W 13th St.,  
New York.  
Hartford Compressed Air Pump Co.....Hartford,  
Conn.  
Ingersoll Rock Drill Co.....1 Park Place, New York.  
McLaren, John.....Hoboken, N. J.  
Morris County Machine & Iron Co.....Dover, N. J.  
Norwalk Iron Works Co.....S. Norwalk, Conn.

## AIR CUSHION PILE DRIVERS.

SHAW, T.....915 Ridge Ave., Phila., Pa. [see p. vii.]

## AIR GRATES.

SNEAD & CO. IRON WORKS.....813 to 839  
W. Market St., Louisville, Ky.  
[see inset opp p. 205.]

## AIR VALVES.

Schenck, J. N.....Plainfield, N. J.

## AJAX METAL.

Thayer & Ross.....50 Broad St., Boston, Mass.

## ALLIGATOR WRENCHES.

NOVELTY BELT HOOK CO.....219 & 221 State  
St., Hartford, Conn. [see p. xxxiv.]

## ANTI-FRICTION METALS.

Du Plaine & Bach.....107 & 109 Plymouth St., Jersey-  
City, N. J.  
Williams, E. A. & Son.....30 & 32 W. Quincy St.,  
Chicago, Ills.

## ANTI-SHAFT RATTLER.

Wilton Mfg. Co., The.....Wilton, Conn.

## ANVILS.

BOKER, HERMANN & CO.....101 & 103 Duane St.  
and 91 & 93 Thomas St., N. Y. [see p. xxx.]  
FISHER & NORRIS.....Trenton, N. J. [see p. xix.]  
Montgomery & Co.....108 Fulton St., New York.

## ASBESTOS.

BICKERTON, T. B. & Co.....12 So. 4th St., Phila., Pa.  
[see p. xxxv.]

## ASBESTOS LIQUID PAINTS.

JOHNS, H. W. MNFG. CO.....87 Maiden Lane,  
New York [see p. xxxi.]

## ASBESTOS MATERIALS.

ASBESTOS FELTING WORKS.....108 Liberty  
St., New York [see p. xxvi.]  
CHALMERS-SPENCE CO.....23 John St., New  
York [see p. xxviii.]  
GILMOUR, R. M.....82 John St., New York.  
[see p. xlii.]  
JOHNS H. W. MNFG. CO.....87 Maiden Lane,  
New York [see p. xxxi.]  
McNAB & BELDEN.....98 John St., New York.  
[see p. xxix.]

## AUGERS.

Challenge Well Auger Co.....St. Louis, Mo.  
Derby Bit Co.....Ansonia, Conn.  
De Witt, Morrison & Kelly.....22d above Market  
St., Phila., Pa.  
LANCASTER MFG. CO.....95 & 97 Liberty St.,  
New York. [see p. xlix.]

## AUTOMATIC KNIFE GRINDERS.

American Twist, Drill & Machine Co., Meredith  
ville, N. H.  
Union Stove Co.....Boston, Mass.

## AUTOMATIC WIRE WORKING MACHINERY.

ADT, JOHN.....22 Artisan St., New Haven, Conn.  
[see p. xxxiii.]

## AXLE BOXES.

PARSONS & LONDON.....Bridgeport, Conn.  
[see p. xl.]

## AXLES.

Concord Axle Co.....Fishersville, N. H.

## BABBITT METAL.

Du Plaine & Bach.....30 and 32 W. Quincy St.,  
Chicago, Ill.  
Hopkins, Chas. H.....Lyndonville, Vt.  
Morrow & Strong.....115 and 117 First St.,  
San Francisco, Cal.

## BALCONIES.

SNEAD & Co., IRONWORKS.....813-839 W. Market  
[see inset opp. p. 205. St., Louisville, Ky.]

## BAND SAW MACHINES.

Hallay, J. & Bro.....626 Race St., Phila., Pa.  
Kimball, H. A.....615 Filbert St., Phila., Pa.  
London, Berry & Orton.....22nd ab. Arch St.,  
Phila., Pa.

## BANK VAULTS.

SNEAD & CO. IRON WORKS, (The).....813-839 W.  
Market St., Louisville, Ky.  
[see inset opp. p. 205.]

## BARBED STAPLE MACHINERY.

ADT, JOHN.....22 Artisan St., New Haven, Conn.  
[see p. xxxiii.]

## \* BAR IRON.

HUBBARD, CHAS.....46 Cliff St., New York.  
[see p. xxxvii.]  
MORRIS, WELLS & CO.....1608 Market St.,  
Phila., Pa. [see p. xviii.]

**BAR AND PIG LEAD AND TIN.**

Blatchford, E. W. & Co.....cor. Clinton and Fulton  
Sts. Chicago, Ill.

**BATTERIES, AUTOMATIC.**

ELECTRO DYNAMIC CO.....121 S. 3d St., Phila.,  
Pa. [see inset opp. pgs. 138 and 139.]

**BAXTER WRENCHES.**

GREENE, TWEED & CO.....118 Chambers St.  
New York. [see p. xxv.]

**BED IRON.**

PARSONS & LANDON.....Bridgeport, Conn.  
[see p. xl.]

**BELL FOUNDERS.**

Williams, E. A. & Son.....107 and 109 Plymouth St.,  
Jersey City, N. J.

**BELLOWS.**

Bayliss, John.....Stamford, Conn.  
Brower & Leeds.....81 Murray St., New York.  
Metz, Geo. W.....919 Market St., Phila., Pa.

**BELT HOOKS.**

BLEWITT, JAMES.....332 7th Ave., New York.  
[see p. xxvii.]  
Cady, Geo. L.....Lowell, Mass.  
CHAMPION BELT HOOK CO.....110 Liberty St.,  
New York. [see p. xxi.]  
Montgomery & Co.....105 Fulton St., New York.  
NOVELTY BELT HOOK CO.....219 & 221 State St.,  
Hartford, Conn. [see p. xxxiv.]  
Smith, Walter.....324 Master St., Phila., Pa.

**\* BELTING.**

BICKERTON, T. B. & CO.....12 S. 4th St., Phila.,  
Pa. [see p. xxxv.]  
BREWER, D. & CO.....42 N. 6th St., Phila., Pa.  
[see p. xl.]  
GERMAN & ROBINSON.....12 N. 4th St., Phila.,  
Pa. [see p. vii.]  
NEW YORK BELTING & PACKING CO.....29  
Park Row, New York. [see p. xxiii.]  
PRENTISS, H. & CO.....42 Dey St., New York.  
[see p. xxix.]  
WILLIAMSON & CASSEDDY.....24 So. 4th St., Phila.,  
Pa. [see p. xxxvii.]

**BELTING MACHINES.**

BEERS, JAMES M.....25 Whitney Av. New Haven,  
Conn. [see p. viii.]

**BELT MACHINERY.**

Weston, C. H.....Yarmouthville, Me.

**BELT STUDS.**

GREENE, TWEED & CO.....118 Chambers St., New  
York. [see p. xxv.]

**BESSEMER STEEL.**

THOMPSON, JAMES R. & Co.....93 John St.,  
New York. [see p. xxx]

**BEVELLING MACHINES.**

BEERS, JAMES M.....25 Whitney Av. New Haven,  
Conn. [see p. viii.]

**\* BITS.**

Dickinson, J.....64 Nassau St., New York.  
Derby Bit Co.....Ansonia, Conn.

**BLACKSMITHS' TOOLS.**

WELLS BROS. & CO.....Greenfield, Mass.  
[see inset opp p. 105.]  
WILEY & RUSSELL MFG. CO.....Greenfield Mass.  
[see inset opp. p. 105.]  
Yerkes & Plumb.....Frankford Pa.

**BLAST FORGES.**

BEECHER & PECK.....New Haven, Conn.  
[see p. xl.]

**BLAST FURNACES.**

Leetonia Boiler Works.....Leetonia, Ohio.

**BLAST FURNACE WORK.**

Tromlee, A.....Port Henry, New York.

**BLAST GAUGES.**

SHAW, T.....915 Ridge Av., Phila., Pa.  
[see p. xl.]

**BLASTING AND GUNPOWDER.**

Dupont de Nemours, E. I. & Co.....Wilmington,  
Del.  
Hazard Powder Co.....New York.  
Lafin & Rand Powder Co.....New York.  
REPAUNO CHEMICAL CO.....305 Walnut St.,  
[see inset opp. p. 218] Phila., Pa.

**BLOWERS.**

Aland, S. & Co.....Rome, N. Y.  
Boston Blower Co. 2 Fosters Wharf, Boston, Mass.  
Bridges, Albert.....46 Cortlandt St., New York.  
Exeter Machine Work.....140 Congress St., Boston,  
Mass.  
Root, P. H. & T. M.....Connersville, Ind.  
Schenck, J. N.....Plainfield, N. J.  
Smith & Sayre Mfg. Co. 21 Cortlandt St., New York.  
Sturtevant, B. F.....72 Sudbury St., Boston, Mass.  
Teller, R. K.....Unadilla, N. Y.  
Urquhart, Jno. S.....46 Cortlandt St., New York.  
Wilbraham Bros.....2318 Frankford Av. Phila., Pa.  
York, S. M.....Cleveland, Ohio.

**BOILER AND PIPE COVERING.**

GILMOUR, R. M.....82 John St., New York.  
[see p. xlii.]

**BOILER AND TUBE COMPOUND.**

HOUGHTON & CO.....15 Hudson St., New York.  
[see p. xxv.]

**BOILER CLEANERS.**

HOTCHKISS, JAMES F.....84 John St., New York.  
[see p. xx.]  
Reiser Steam Boiler Co., (Limited) .....Prairie du  
Chien, Wis.  
Sharp, Thomas & Co.....Salem, Ohio.

**BOILER CLEANING COMPOUND.**

LORD, GEO. W.....316 Union St., Phila., Pa.  
[see p. xl.]

**BOILER COVERING.**

ASBESTOS FELTING WORKS.....108 Liberty St.  
New York. [see p. xxvi.]  
CHALMERS-SPENCE CO.....23 John St., New  
York. [see p. xxviii.]  
CUTHBERT, THOMAS N.....20 Cortlandt St., New  
York. [see p. xxix.]  
JOHNS, H. W. MFG. CO.....87 Maiden Lane, New  
York. [see p. xxxi.]  
McNAB & BELDEN.....96 John St., New York.  
[see p. xxix.]  
WHITE & CROWELL.....235 West St., New York.  
[see p. xxvi.]

**BOILER DIS-INCRUSTANT.**

MOORE, JOHN D.....38 Dey St., New York.  
[see p. xxxi.]

**BOILER FEEDERS.**

RUE MFG. CO.....904 Filbert St. Phila., Pa.  
[see p. xli.]  
VALLEY MACHINE CO., .....Easthampton Mass.  
[see p. xvi.]

**BOILER FITTINGS.**

SCHÄFFER & BUENBERG,.....40 John St., New York. [see p. xxvii.]

**BOILER FLUES & RIVETS.**

COONEY, DANIEL F.,.....88 Washington St., New York. [see p. xxvi.]

**BOILER FRONTS.**

CRESSWELL, DAVID S.,.....816 Race St., Phila., Pa. [See p. xliii.]

**BOILER FURNACES.**

McGinnis, C. E.,.....91 Washington St., Chicago, Ill.  
Upton, A. F.,.....7 Oliver St., Boston, Mass.

**BOILER MAKERS.**

ALLEN, WM. & SONS,.....Worcester, Mass. [see p. ix.]  
Archambault, A. L., cor. Beach and Marlborough Sts., Phila., Pa.  
Atlas Engine Works, .....Indianapolis, Ind.  
Ayar Machine Works, .....Salem, N. J.  
Bromich, Joseph, .....Topeka, Kan.  
Coleman, H. Dudley & Bro.,.....cor. Magnolia and Clara Sts., New Orleans.  
Great Western Mfg. Co.,.....Leavenworth, Kan.  
HANFORD, W.,.....27 Tremont Row, Boston, Mass. [See p. xlv.]  
HARRISON BOILER WORKS, S. E. cor. 15th and Wood Sts., Phila., Pa. [see p. xi.]  
HINSDALE, CAPT. C. & SON,.....34 So. Canal St. Chicago, Ill. [see p. iv.]  
Lawless, Peter,.....132 Front St., Memphis, Tenn.  
Leetonia Boiler Works, .....Leetonia, Ohio.  
MORRIS, I. P. CO.,.....Richmond and Norris Sts., Phila., Pa. [see p. xi.]  
Murray Dougal & Co.,.....Milton, Pa.  
Navor, Jacob, Front St., ab. Girard ave. Phila., Pa.  
NORTH WESTERN MFG. & CAR CO., Stillwater Minn.  
Oneida Iron Works,.....Oneida, N. Y.  
Phoenix Iron Works,.....Meadville, Pa.  
PAUL, GEO. K. & CO.,.....98 Milk and 2 Bath Sts. Boston, Mass. [see p. vii.]  
Rumsey, L. M. Mfg. Co.,.....St. Louis, Mo.  
SKIDMORE, P. H. & SONS,.....Bridgeport, Conn. [see p. xxxi.]  
SUPPLEE, T. R.,.....149 North 3d St., Phila., Pa. [see p. xxxvii.]  
Union Machine Shop,.....317 to 319 Almond St. St. Louis, Mo.  
Walburn, A. W.,.....Fort Scott, Kan.

**BOILER PLATE.**

CARMICHAEL & EMMENS,.....130 to 134 Cedar St. New York, and 21 to 27 W. Lake St., Chicago, Ill. [see p. xxi.]  
COONEY, DANIEL F.,.....88 Washington St., New York. [see p. xxvi.]  
KENT, D. H. & CO., Limited,.....1009 Arch St. [See front fly leaf] Phila., Pa.  
MORRIS, WHEELER & CO.,.....1608 Market St. Phila., Pa. [see p. xviii.]  
Ripley & Kimball,.....907 N. Main St., St. Louis, Mo.  
Seyfert, S. R.,.....Reading Pa.

**BOILER RIVETS.**

KENT, D. H. & CO., Limited, 1009 Arch St., Phila., [See front fly leaf.] Pa.

**\* BOILERS.**

COOKE & CO.,.....12 Cortlandt St., New York. [See p. xliii.]  
FORSAITH, S. C. & CO., Manchester, N. H., and 209 Centre St., New York. [See p. xxviii.]  
MANNING, MAXWELL & MOORE, 111 Liberty St., New York. [see p. xlv.]  
SMITH, H. B., MACHINE CO.,.....925 Market St., Phila., Pa. [See inset opp. p. 154.]  
TOOMEY, FRANK,.....131 N. 3d St., Phila., Pa. [See inset opp. p. 145.]

**BOILER TESTING APPARATUS.**

RUE MFG. CO.,.....904 Filbert St., Phila., Pa. [See p. xii.]

**BOILER TUBES.**

FORD & KENDIG,.....712 Filbert St., & 1428-1432 [See p. iii.] Callowhill St., Phila., Pa.  
KENT, D. H. & CO., Limited,.....1009 Arch St., [See front fly leaf.] Phila., Pa.  
MERCHANT & CO.,.....525 Arch St., and 520 [see inset opp. p. 204] Cherry St., Phila., Pa.  
NATIONAL TUBE WORKS CO., McKeesport, Pa. [See p. ii.]  
READING IRON WORKS,.....16 & 18 N. 5th St., [see inset opp. p. 154.] Phila., Pa.  
Seyfert, S. R.,.....Reading, Pa.

**BOLT AND NUT MACHINERY.**

Boynton & Plummer,.....Worcester, Mass.  
Brown, H. B. & Co.,.....East Hampton, Conn.  
Brown & Sharpe Mfg. Co.,.....Providence, R. I.  
Gray & Sheatz,.....Paint & Pearl Sts., Camden, N. J.  
Newton, C. C.,.....241 Callowhill St., Phila., Pa.

**BOLT AND RIVET CLIPPERS.**

Chambers, Brother & Co.,.....52d St. bel. Lancaster Av., Phila., Pa.

**BOLT CUTTERS.**

Boynton & Plummer,.....Worcester, Mass.  
Cleveland Machinery Depot,.....Cleveland, Ohio.  
Howard Iron Works,.....Buffalo, N. Y.  
PLACE, GEORGE, MACHINERY CO., 122 & ham- [See inset opp. p. 8.] bers St., New York.  
Pratt & Whitney Co.,.....Hartford, Conn.  
Reece Bros.,.....Greenfield, Mass.  
Reeve & Son,.....Cleveland, Ohio.  
SELLERS, WM. & CO.,.....1600 Hamilton St., [See inset opp. p. 153.] Phila., Pa.  
Standard Nut Company,.....Pittsburg, Pa.  
WELLS BROS. & CO.,.....Greenfield, Mass. [See inset opp. p. 105.]  
WILEY & RUSSELL MFG. CO., Greenfield, Mass. [See inset opp. p. 105.]

**\* BOLTS.**

SHUMWAY, BURGESS & CO., cor. Michigan & [See p. xi.] Franklin St., Chicago, Ill.  
SNEAD & CO. IRON WORKS,.....813 to 839 W. Market St., Louisville, Ky. [see inset opp. p. 205.]

**\* BOLTS AND NUTS.**

Allentown Rolling Mill Co.,.....Allentown, Pa.  
American Bolt Company,.....Lowell, Mass.  
Eagle Bolt Works (Welsh & Lea),.....145 Columbia Av., Phila., Pa.  
Elba Iron & Bolt Co.,.....Pittsburg, Pa.  
Fellows, John,.....70 Broadway, Brooklyn, N. Y.  
Haskell, Wm. H. & Co.,.....Pawtucket, R. I.  
Hoopes & Townsend, 1330 Buttonwood, Phila., Pa.  
Hopkins, Chas. H.,.....Lyndonville, Vt.  
Illinois Iron & Bolt Co.,.....Carpentersville, Ill.  
Indianapolis Machine & Bolt Works, Indianapolis, Ind.  
Ives, Hobart B., 178 St. John St., New Haven, Conn.  
Lynchburg Foundry & Mach. Co., Lynchburg, Va.  
MANNING, MAXWELL & MOORE,.....111 Liberty [See xlv.] St., New York  
Mansfield Bolt & Nut Co.,.....Mansfield, Ohio.  
Moore, S. H. & E. Y.,.....163 Lake St., Chicago, Ills.  
MOTLEY & STERLING,.....86 John St., New York. [see p. xxvii.]  
New Haven Nut Co.,.....Westville, Conn.  
Pawtucket Mfg. Co.,.....Pawtucket, R. I.  
Penn Iron Co.,.....Lancaster, Pa.  
Pittsburg Mfg. Co.,.....Railroad St. n. 28th. Pittsburg, Pa.  
Russell, Burdall & Ward,.....Port Chester, N. Y.  
Springfield Iron Co.,.....Springfield, Ills.  
Standard Nut Co.,.....Pittsburg, Pa.  
Stanley Works,.....New Britain, Conn.  
Sternbergh, J. H.,.....Reading, Pa.  
Townsend, Wilson & Hubbard,.....231 Cherry St., Phila., Pa.

**\* BORING MACHINES.**

BEERS, JAMES M.....25 Whitney Av., New Haven,  
[see p. viii.] Conn.  
Snell Mfg. Co.....Fiskdale, Mass.

**BORING MILLS.**

Niles Tool Works.....Hamilton, O.  
POND, DAVID W.....Worcester, Mass.  
[see inset opp. p. 203.]  
POWELL, A. M. & CO., 136-140 Union St., Worcester,  
[see p. xlix.] Mass.

**BRACKETS.**

PARSONS & LANDON.....Bridgeport, Conn.  
[see p. xi.]

**BRANDING IRONS.**

ADAMSON, S. E.....9 Murray St., New York.  
[see p. xxxiv.]

**BRAND LETTERS.**

VANDERBURG, WELLS & CO., 110 Fulton St. &  
[see p. lii.] 16 & 18 Dutch St., New York.

**BRASS (Sheet).**

MERCHANT & CO.....525 Arch & 520 Cherry Sts.  
[see inset opp. p. 204.] Phila., Pa.  
Rome Iron Works.....Rome, N. Y.

**BRASS & COPPER TUBES.**

Benedict & Burnham Mfg. Co., 99 Church St., N. Y.  
Besley, C. H. & Co.....175 Lake, Chicago, Ills.  
Bridgeport Brass Co.....Bridgeport, Conn.

**BRASS & COPPER TUBES (Seamless)**  
American Tube Works, J. W. Cotton, Agt., 79 E  
Lake St., Chicago, Ills.  
Benedict & Burnham Mfg. Co., 99 Church St., N. Y.

**BRASS & STEEL WIRE BRUSHES.**  
MAHLER, P., [see p. xxxix.] 302 Pearl St., N. Y.

**BRASS BUTTS.**

OSBORNE & CHEESMAN CO.....Ansonia, Conn.  
[see p. xv.]

**BRASS COCKS & VALVES.**

PANCOAST & MAULE, 243 & 245 So. 3rd St., Phila.,  
[see p. xlii.] Pa.

**BRASS FINISHERS.**

CARTER, EDWARD, [see p. xi.] Ansonia, Conn.  
COOPER, JONES & CADBURY, 1136 Ridge Ave.,  
[see inset opp. p. 155.] Phila., Pa.

**BRASS FINISHERS' CHUCKS.**

Cushman, A. F.....Hartford, Conn.  
HORTON, E. & SON CO., The.....Windsor Locks,  
[see p. xlii.] Conn.  
National Chuck Co.....New Haven, Conn.

**BRASS FITTINGS.**

GERMAN & ROBINSON, 12 N. 4th St., Phila., Pa.  
[see p. vii.]

**\* BRASS FOUNDERS.**

CARTER, EDWARD, [see p. xi.] Ansonia Conn.  
CHAPMAN VALVE MFG. CO., Indian Orchard,  
[see p. iii.] Mass.  
COOPER, JONES & CADBURY, 1136 Ridge ave.,  
[see inset opp. p. 155.] Phila., Pa.  
PEET VALVE CO., 163 Albany St., Boston, Mass.  
[see p. ii.]  
PENNSYLVANIA BRASS WORKS, 1512 Spring  
[see p. xii.] Garden St., Phila., Pa.  
Schneider & Trenkamp .....Cleveland, Ohio.  
Shaw, Kendall & Co.....Toledo, Ohio.  
Teller, R. K.....Unadilla, N. Y.  
Tromlee, A.....Port Henry, N. Y.

**BRASS GLOBE VALVES.**

Perkes, Chas.....625 Arch St., Phila., Pa.  
READING IRON WORKS, 16 & 18 North 5th St.,  
[see inset opp. p. 154.] Phila., Pa.

**BRASS GOODS.**

EXCELSIOR GAS LIGHT & MFG. CO., 122 to 128  
[see p. vi.] Michigan St., Chicago, Ills.  
Judd, H. L. & Co.....91 Chambers St., N. Y.  
KNAPP MFG. CO.....22 & 24 Frankfort St., N. Y.  
[see p. xxvii.]  
POOL, A. ALEX. & CO., [see p. lii.] Newark, N. J.  
RYAN, J. J. & CO.....59 S. Canal St., Chicago, Ills.  
[see p. xxxvii.]  
Shaw, Kendall & Co.....Toledo, Ohio.

**BRASS.**

Lehman, B. E.....Bethlehem, Pa.  
Rome Iron Works.....Rome, N. Y.

**BRASS TUBING.**

American Tube Works, 97 State St., Boston, Mass.  
Benedict & Burnham Mfg. Co., .....99 Church St.,  
New York.  
Bridgeport Brass Co.....Bridgeport, Conn.  
MERCHANT & CO.....525 Arch St., Phila., Pa.  
[see inset opp. p. 204.]  
Montgomery & Co.....105 Fulton St., New York.  
Rome Iron Works.....Rome, N. Y.

**BRASS VALVES.**

FORD & KENDIG.....712 Filbert St., and 1428-32  
Callowhill, Phila., Pa. [see p. iii.]  
MARCELLUS, C. N. & Co.....69 Varick St., New  
York. [see p. v.]

**BRASS WIRE.**

Benedict & Burnham Mfg. Co., 99 Church St., New  
York City.  
Bridgeport Brass Co.....Bridgeport, Conn.  
Holmes, Booth & Haydens.....Waterbury, Conn.  
Rome Iron Works.....Rome, N. Y.

**BRASS WORK.**

GERMAN & ROBINSON, 12 N. 4th St., Phila., Pa.  
[see p. vii.]

**BREWERS' KETTLES.**

GANNON, THOMAS, 66 to 76 Hudson St., Jersey  
City, N. J. [see p. xiv.]

**BRONZE STATUARY.**

AMES MFG. CO., Chicopee, Mass. [see inset opp.  
p. 104.]

**BUCKET TRAPS.**

ALBANY STEAM TRAP CO., THE, Albany, N. Y.  
[see p. iv.]

**BUFFING AND POLISHING MA-  
CHINERY.**

ADT, JOHN, .....22 Artisan St., New Haven, Conn.  
[see p. xxxiii.]  
American Twist Drill Co.....Meredithville, N. H.  
Hart Emery Wheel Co.....Detroit, Mich.

**BUILDING COLUMNS.**

PARSONS & LANDON.....Bridgeport, Conn.  
[see p. xi.]

**BUTT, DRILLING, AND MILLING  
MACHINERY.**

ADT, JNO.....22 Artisan St., New Haven, Conn.  
[see p. xxxiii.]

**CALIPER GAUGES.**

Betts Machine Co.....Wilmington, Del.  
Brown & Sharpe Mfg. Co.....Providence, R. I.

**CALIPERS.**

American Tool Co.....Cleveland, Ohio.  
Bemis & Call Co.....Springfield, Mass.  
Hyde, Ayer & Co.....Springfield, Mass.  
SPRINGFIELD GLUE & EMERY WHEEL CO.,  
28 Taylor St., Springfield, Mass. [see p.  
xxxviii.]  
Starrett, L. S.....A'hol, Mass.  
Stevens, J. & Co.....Chicopee Falls, Mass.

**CAR & RAILROAD LUMBER.**

VANDERBILT & HOPKINS, ... 120 Liberty St.,  
New York. [see p. xxii.]

**\*CAR BUILDERS.**

Allison, W. C. & Co., ... S. 32d cor. Chestnut St.,  
Phila., Pa.  
Blair Bros., ... Huntington, Pa.  
Harlan & Hollingsworth Co., ... Wilmington, Del.  
Murray, Douglass & Co., ... Milton, Pa.  
NORTH WESTERN MFG. & CAR CO., ... Still-  
water, Minn.  
Pullman Palace Car Co., ... Pullman, Ills.  
Stephenson, John, ... 47 E. 27th St., New York.

**CAR CASTINGS.**

FISHER, HIRAM H., ... [see p. l.] Allentown, Pa

**CARRIAGE WHEELS.**

BEERS, JAMES M., 25 Whitney Av., New Haven,  
Conn. [see p. viii.]

**CAR SPRINGS.**

NEW YORK BELTING & PACKING CO., ... 29  
Park Row, New York. [see p. xxiii.]

**CAR WHEEL CHUCKS.**

HORTON, E. & SON CO., THE, ... Windsor Locks,  
Conn. [see p. xiii.]  
NATIONAL MFG. CO., ... 20-21 Artisan St., New  
Haven, Conn. [see p. xxxiv.]

**CAR WHEELS.**

Colorado Iron Works, ... Denver, Col.  
NORTH WESTERN MFG. & CAR CO., Stillwater,  
Minn.  
UNION FOUNDRY & PULLMAN CAR WHEEL  
WORKS, office, Chicago, Ills.; work-, Pull-  
man, Ill. [see p. xv.]

**CASING.**

NATIONAL TUBE WORKS CO., McKeesport, Pa.  
[see p. ii.]

**\*CAST IRON FITTINGS.**

MARCELLUS, C. N. & Co., 69 Varick St., New  
[see p. v.] York City  
READING IRON WORKS, 16 & 18 N. 5th St.,  
[see inset opp. p. 164] Phila., Pa.

**CAST IRON PIPE.**

BROWN & OWEN, N. W. cor. 12th & Noble Sts.  
[see p. liii] Phila., Pa.  
FISHER, HIRAM H., Allentown, Pa., ... [see p. l.]  
WOOD, R. D. & Co., 400 Chestnut St., Phila., Pa.  
[see p. v.]

**\*CHAIN.**

OSBORNE & CHEESMAN CO., ... Ansonia, Conn.  
[see p. xv.]

**CHAIN HOISTS.**

Cincinnati Chain Hoist Co., 81 E. 3d St., ... Cincin-  
nati, Ohio.  
Yale Lock Co., ... Stamford, Conn.

**CHECK VALVES.**

LUDLOW VALVE MFG. CO., 938-954 River St.,  
& 67-83 Vail Av., Troy, New York.  
[see inset opp. p. 219.]

**CHILLED ROLLERS.**

Farrell Foundry & Mach. Co., ... Waterbury, Conn.

**CHUCKS.**

ALMOND, T. R., ... 84 Pearl St., Brooklyn, N. Y.  
[see p. xxxvii.]  
Cushman, A. F., ... Hartford, Conn.

**CHUCKS—Continued.**

Durkee & Doe, ... 40 S. Canal St., Chicago, Ill.  
Farmer, Thomas, Jr., Co., ... Grand Rapids, Mich.  
FLANDERS, L. B., MACHINE WORKS, 1025 Ham-  
[see p. x.] iltion St., Phila., Pa.  
Foot, James, ... 40 Broadway, New York.  
HORTON, E. & SON CO., ... Windsor Locks,  
[see p. xiii.] Conn.  
KIMBALL, C. E., ... 91 Fort Hill Square,  
[see p. xiv.] Boston, Mass.  
LOVELL, F. S., Fitchburg, Mass., ... [see p. li.]  
NATIONAL MFG. CO., The, 20 & 24 Artisan st.,  
[see p. xxxiv.] New Haven, Conn.  
Oneida Steam Engine & Fdry. Co., ... Oneida, N. Y.  
Schenck, J. N., ... Plainfield, N. J.  
SWEETLAND & CO., ... New Haven, Conn. [see  
p. xi.]  
TALLMAN & McFADDEN, 607 Market St., Phila.,  
[see p. xliii.] Pa.  
Thompson, Frank, ... 168 Centre St., New York.  
Union Mfg. Co., ... New Britain, Conn.  
Wells, James H., ... Tampa, Fla.

**CIRCULAR BRUSHES.**

MAHLER, P., ... 302 Pearl St., New York.  
[see p. xxxix.]

**CLAY RETORTS.**

BORGNER & O'BRIEN, 23d St., av. Race, Phila.,  
[see p. ix.] Pa.

**CONDENSING COILS.**

GANNON, THOMAS, 66 to 76 Hudson St., Jersey  
[see p. xiv.] City, N. J.

**\*CONSULTING ENGINEER.**

WILKINSON, ALFRED, Manayunk, Pa. [see p.  
lii.]

**\*COOKING APPARATUS.**

WOOD, JAMES P. & CO., 39 S. 4th St., Phila., Pa.  
[see p. viii.]

**\*COPPER (Seamless Tubing).**

MERCHANT & CO., 525 Arch & 520 Cherry Sts.,  
[see inset opp. p. 204.] Phila., Pa.

**\*COPPER (Sheet).**

MERCHANT & CO., 525 Arch & 520 Cherry Sts.,  
[see inset opp. p. 204.] Phila., Pa.

**COPPER (Ingot).**

MERCHANT & CO., 525 Arch & 520 Cherry Sts.,  
[see inset opp. p. 204.] Phila., Pa.

**COPPER TYPE.**

ADAMSON, S. E., ... 9 Murray St., New York.  
[see p. xxxiv.]

**CORDAGE MACHINERY.**

Silsby, Thos. J. & Son, Broadway Bridge, Boston,  
Mass.

**CORNICE MACHINERY.**

OHL, GEO. A. & CO., ... 212 to 218 Passaic Ave.,  
E. Newark, N. J. [see page xlviii.]

**CORRUGATED PIPE.**

AUSTIN, OBDYKE & CO., ... 1705 Chestnut St.  
Phila., Pa. [see p. vii.]

**CORUNDUM WHEELS.**

CRYSTAL EMERY WHEEL CO., Northampton,  
[see p. xiv.] Mass.  
LEHIGH VALLEY EMERY WHEEL CO.,  
[see inset opp. p. 222.] Lehighton, Pa.

**COUNTERSINKING MACHINERY.**

ADT, JOHN, ... 32 Artisan, New Haven, Conn.  
[See p. xxxiii.]



**COUPLING.**

HODSON, G. & J.....226 Arch St., Phila., Pa.  
[See inset opp. p. 222.]

**COTTON GINS.**

Camp, Thomas.....Covington, Ga.

**COTTON SEED OIL PRESSES.**

NEWELL UNIVERSAL MILL CO.....34 Cort-  
[See p. lii.] landt St., New York.

**COTTON WASTE.**

BICKERTON, T. B. & Co.....12 S. 4th St.,  
[See p. xxxv.] Phila., Pa.

**CRANK SHAFTS.**

CHESTER STEEL CASTINGS CO., 407 Library  
St., Philadelphia, Pa.; Works, Chester, Pa.  
[See p. xxxv].

**CRESTINGS.**

SNEAD & CO, IRON WORKS, THE, 813 to 839  
W. Market St., Louisville, Ky. [See inset  
opp. p. 205.]

**CROSSHEADS.**

CHESTER STEEL CASTINGS CO., 407 Library  
St., Phila., Pa.; Works, Chester, Pa. [See p.  
xxxv].

**\*CRUCIBLE STEEL.**

THOMPSON, JAMES R. & CO, 93 John St., N. Y.  
[See p. xxx].

**CRUSHERS.**

BECKETT & McDOWELL MFG CO., 120 Liberty  
[See p. xxxix.] St., New York.

**CUTLER'S MACHINERY.**

NAUGATUCK MACHINE CO., Union City, Conn.  
[See p. xxxvii].

**\*CUTLERY.**

BOKER, HERMANN & CO., 101 & 103 Duane &  
91 & 93 Thomas Sts., New York [see p. xxx.]  
McCOY & SANDERS.....43 Chambers St. N.Y.  
[See p. xxx.]

**\*CUT NAILS.**

MORRIS, WHEELER & CO, 1608 Market St.,  
[See p. xviii.] Philadelphia, Pa.

**\*CUT NAILS & SPIKES.**

KENT, D. H. & CO., LIMITED, 1009 Arch St.  
Phila., Pa. [see front fly leaf.]

**CUTTING DIES & PUNCHES.**

BECKER, JOHN.....28 Oliver St., Boston, Mass.  
[See p. xv].

**\*CYLINDER & MACHINE OILS.**

BLEWITT, JAMES.....322 Seventh Av., New York.  
[See p. xxvii].

**CYLINDER BORING MACHINES.**

FLANDERS, L. B., MACHINE WORKS.....1025  
[See p. x.] Hamilton St., Phila., Pa.

**CYLINDER COCKS.**

Hopkins, Chas. H.....Lyndonville, Vt.

**CYLINDER GAS WORKS.**

EXCELSIOR GAS LIGHT & MFG CO., 122 to  
[See p. vi.] 128 Michigan St., Chicago, Ills.

**DEAD STROKE POWER HAMMERS.**

JUSTICE, PHILIP S. & CO., 14 N. 5th St., Phila.,  
[See p. xxx.] Pa.

**DIAMOND TURNING TOOLS.**

Sullivan Machine Co.....Claremont, N. H.

**\*DIES.**

NEW YORK MACHINE CO.....13 Baxter St., N. Y.,  
[See p. l.]

**DIRECTORY PUBLISHERS.**

FARLEY, PAUL & BAKER, 530 Market & 523  
Minor Sts., Phila., Pa. [See back fly leaf,  
also inset opp. p. 223.]

**DOOR HANGERS & ROLLERS.**

JONES, S. W., South Union, Maine [see inset opp.  
p. 222.]

**DRAFT REGULATORS**

Schenck, J. N..... Plainfield, N. J.

**DRILL & SHAPING MACHINERY.**

Boynton & Plummer.....Worcester, Mass.  
Hendy Machine Co.....Wolcottville, Conn.  
NEW YORK MACHINE CO.....13 Baxter St.  
New York. [see p. l.]

**DRILL CHUCKS.**

ALMOND, THOMAS R. 84 Pear St., Brooklyn, N.Y.  
[see p. xxxvii]

Cushman, A. F.....Hartford, Conn.  
Morse Twist Drill & Mach. Co. New Bedford, Mass.  
Whiton, D. E.....West Stafford, Conn.

**DRILLING MACHINES.**

Betts Machine Co.....Wilmington, Del.  
Bickford, H.....179 E. Front St., Cincinnati, Ohio.  
Blaindell, P. & Co.....Worcester, Mass.  
COOKE & CO.....12 Cortlandt St., New York.  
[see p. xlii.]

Cox & Prentiss.....Cleveland, Ohio.  
Folger, A. E. & Co.....Springfield, Ohio.  
GARVIN, E. E. & Co. 139-143 Centre St., New York.  
[see p. xxxviii.]

Harriington, Edwin & Son.....1500 Penna. Ave., Phila.,  
Penna.

Jones & Lamson Machine Co.....Windsor, Vt.  
Machine Tool Works, The.....24th & Wood Sts.,  
Phila., Pa.

MANNING, MAXWELL & MOORE.....111 Liberty  
[see p. xlii.] St., New York.

Miller's Falls Company.....Miller's Falls, Mass.  
Morse Twist Drill & Machine Co.....New Bedford,  
Mass.

Newton Machine Tool Works.....2341 Callowhill St.,  
Phila., Pa.

Niles Tool Works.....Niles, Mich.

PLACE, GEORGE, MACHINERY CO., THE,  
122 Chambers & 103 Reade Sts., N. Y.  
[see inset opp. p. 8.]

POND, DAVID W.....Worcester, Mass.  
[see inset opp. p. 205.]

POWELL, A. M. & CO.....136-140 Union St., Worcester,  
[see p. xlix.] Mass.

Pratt & Whitney Company.....Hartford, Conn.

Reed, F. E.....Worcester, Mass.

SELLERS, WM. & Co. 1600 Hamilton St., Phila., Pa.  
[see inset opp. p. 153.]

Shepherd, H. L. & Co.....331-337 West Front St.,  
Cincinnati, Ohio.

SLATE, DWIGHT.....Hartford, Conn.  
[see p. xxxix.]

Thorne, De Haven & Co.....21st St., near Market,  
Phila., Pa.

WELLS BROS. & CO.....Greenfield, Mass.  
[see inset opp. p. 105.]

WILEY & RUSSELL MFG CO.....Greenfield, Mass.  
[see inset opp. p. 105.]

**DRILL PRESSES.**

AMES MFG. CO.....Chicopee, Mass.  
[see inset opp. p. 104.]  
GARVIN, E. E. & CO.....139-143 Centre St., New  
[see p. xxxviii.] York.

**DRILLS.**

Bickford, H. C. v. Pike & Front Sts., Cincinnati, O.  
Enterprise Machine Co.....Geneva, Ohio.  
Gleason, W.....Rochester, N. Y.  
Morse Twist Drill & Machine Co.....New Bedford,  
Mass.  
Pennsylvania Diamond Drill Co.....Pottsville, Pa.

**DROP DIES.**

BEECHER & PECK.....25 Whitney Ave., New  
[see p. xl.] Haven, Conn.

**DROP FORGINGS.**

AMES MFG. CO. ....Chicopee, Mass.  
[see inset opp. p. 104.]  
BEECHER & PECK.....25 Whitney Ave., New  
[see p. xl.] Haven, Conn.  
Billings & Spencer Co., The.....Hartford, Conn.

**DROP PRESSES.**

BEECHER & PECK.....New Haven, Conn.  
[see p. xl.]

**DYE WOOD EXTRACTORS.**

ALLEN, WM. & SONS.....Worcester, Mass.  
[see p. ix.]

**DYNAMO MACHINES.**

ELECTRO DYNAMIC CO.....121 So. 3rd St., Phila.,  
[see inset opp. p. 138-139.] Pa.

**EJECTORS FOR CONVEYING  
WATER OR LIQUIDS.**

NATHAN & DREYFUS.....94 Liberty St., New  
York [see p. xxvii.]  
STORER, G. W. ....140 N. 3d St., Phila., Pa.  
[see back fly leaf.]

**ELECTRIC BELLS.**

POOL, A. ALEX. & CO.....Newark, N. J. [see p. lii.]

**ELECTRIC LIGHTING APPARATUS.**

VAN DEPOELE ELECTRIC LIGHT CO.....Van  
Buren & Franklin Sts., Chicago, Ills. [see  
p. xv.]

**ELECTRIC POWER.**

ELECTRO DYNAMIC CO. The.....121 S. 3rd St.,  
Phila., Pa. [see inset opp. p. 138 & 139.]

ELECTRO DYNAMIC CO. OF PHILADELPHIA  
[see inset opp. p. 138 & 139.]

**ELEVATORS.**

CLEM & MORSE.....413 Cherry St., Phila., Pa.  
[see p. xlviii.]  
FRISBIE, D. & CO.....481 N. 5th St., Phila., Pa.  
[see p. xvi.]  
HANFORD, W.....27 Tremont Row, Boston, Mass.  
[see p. xlv.]  
KIMBALL, C. E.....191, Fort Hill Square, Bos-  
ton, Mass. [see p. xiv.]  
NAUGATUCK MACHINE CO.....Union City,  
Conn. [see p. xxxvii.]  
SKIDMORE, P. H. & SONS.....Bridgeport, Conn.  
[see p. xxxi.]

**\*EMERY WHEELS.**

American Twist Drill & Machine Co.....Meredith-  
ville, N. H.  
ANDRES, H.....24 N. 4th St., Phila., Pa.  
[see p. xxxv.]  
BREWER, D. & CO.....42 N. 6th St., Phila., Pa. [see  
p. xl.]

**\* EMERY WHEELS—Continued.**

CRYSTAL EMERY WHEEL CO., Northampton,  
Mass. [see p. xiv.]  
GERMAN & ROBINSON.....12 N. 4th St., Phila.,  
Pa. [see p. vii.]  
Hart Emery Wheel Co.....Detroit, Mich.  
Hill, Clarke & Co.....St. Louis, Mo.  
LEHIGH VALLEY EMERY WHEEL CO.,  
[see inset opp. p. 222.] Lehigh, Pa.  
Mason, J. F. & Co., 924 & 926 N. Main St., St. Louis,  
Mo.  
NEW YORK BELTING & PACKING CO.....29  
Park Row, New York [see p. xxiii.]  
Northampton Emery Wheel Co.....199 Lake St.,  
Chicago, Ills.  
PRENTISS, H. & CO.....42 Dey St., New York.  
[see p. xxix.]  
SPRINGFIELD GLUE & EMERY WHEEL CO.  
28 Taylor St., Springfield, Mass. [see p.  
xxxviii.]  
TANITE CO., The.....Stroudsburg, Monroe Co., Pa.  
[see inside front cover.]

**EMERY.**

SPRINGFIELD GLUE & EMERY WHEEL CO.,  
28 Taylor St., Springfield, Mass. [see p.  
xxxviii.]

**EMERY GRINDERS' SUPPLIES.**

ANDRES, H. 24 N. 4th St., Phila., Pa. [see p. xxxv.]

**EMERY POLISHERS' SUPPLIES.**

ANDRES, H., 24 N. 4th St., Phila., Pa. [see p. xxxv.]

**EMERY WHEEL DRESSERS.**

NOVELTY BELT HOOK CO.....219 & 221 State  
St., Hartford, Conn. [see p. xxxiv.]

**EMERY WHEEL MACHINERY.**

CRYSTAL EMERY WHEEL CO., Northampton,  
Mass. [see p. xiv.]  
SPRINGFIELD GLUE & EMERY WHEEL CO.,  
28 Taylor St., Springfield, Mass. [see p.  
xxxviii.]

**\*ENGINE BUILDERS.**

Anderson, Bros.....Peekskill, N. Y.  
Archambault, A. L.....Beach & Marlborough Sts.,  
Phila., Pa.  
Atlas Engine Works.....Indianapolis, Ind.  
Ayar Machine Works.....Salem, N. J.  
Bailey, T. R.....Owosso, Mich.  
BECKETT & McDOWELL MFG. CO., 120 Liberty  
Street, New York. [see p. xxxix.]  
BUTTERWORTH & LOWE, Grand Rapids, Mich.  
Camp, Thos.....Covington, Ga.  
Cole, R. D. & Co.....Newman, Ga.  
Coleman, H. Dudley & Bro.....Magnolia & Clara Sts.  
New Orleans, La.  
Colorado Iron Works.....Denver, Col.  
Coutie, Wm. & Son.....Troy, N. Y.  
Excelsior Iron Works.....87 N. Clinton St., Chicago,  
Ills.  
HANFORD, W.....27 Tremont Row, Boston, Mass.  
[see p. xlv.]  
Harris, Wm. A.....Providence, R. I.  
Hashow, Maish & Davis.....Minneapolis, Minn.  
Hawkins, Wm. 54 & 56 M. & E. R. Ave., Newark,  
N. J.  
HINSDALE, CAPT. C. & SON.....34 S. Canal St.,  
Chicago, Ills.  
Hoff, Fontaine & Abbott.....1162 N. 3rd St., Phila., Pa.  
McElroy & Armitage.....Keokuk, Iowa.  
Madison Mfg. Co.....Madison, Wis.  
Maddin, J. & Son.....199 Greene St., Jersey City, N. J.  
Mitta & Merrill.....East Saginaw, Mich.  
NORTH WESTERN MFG. & CAR CO.....Stillwater,  
Minn.  
Novelty Iron Works.....Dubuque, Iowa.

**\*ENGINE BUILDERS—Continued.**

Omaha Foundry & Machine Co.....Omaha, Neb.  
 Parsons, Henry.....Marlboro, Mass.  
 PAUL, GEO. K. & Co.....98 Milk St., & 2 Bath St.,  
 Boston, Mass. [See p. vii.]  
 Phoenix Iron Works.....Meadville, Pa.  
 Reynolds & Lang.....Ithaca, N. Y.  
 Rumley, L. M. Mfg. Co.....St. Louis, Mo.  
 Sharp, Thomas & Co.....Salem, Ohio.  
 Sharpless, P. M.....West Chester, Pa.  
 Shaw, N. & Co.....Eau Claire, Wis.  
 Sullivan Machine Co.....Claremont, N. H.  
 SUPPLEE, T. R.....149 3rd St., Phila., Pa.  
 [See p. xxxvii.]  
 Union Machine Shop.....317 & 319 Almond St., St.  
 Louis, Mo.  
 Union Mfg. Co.....Georgetown, Col.  
 Union Stove & Machine Works.....Leavenworth,  
 Kan.  
 Walburn, A. W.....Fort Scott, Kan.  
 Whitney, Geo. H.....Nashua, N. H.  
 Willard, Chas. P.....20 La Salle St., Chicago, Ills.

**ENGINE BUILDERS' SUPPLIES.**

JAMER, JACOBS & CO., 84 John St., New York,  
 and 148 First St., Brooklyn, E. D. N. Y.  
 [see p. xliiv.]

**ENGINE COUNTERS.**

ASHCROFT MFG. CO.....111 Liberty St., New York.  
 [See p. xli.]

**ENGINEERS.**

Cummer Engine Co.....Cleveland, Ohio.

**\* ENGINEERS' SUPPLIES.**

BLEWITT, JAMES.....332 7th Ave., New York.  
 [See p. xxvii.]  
 CROSBY STEAM GAGE & VALVE CO.....95 & 97  
 [See p. viii.] Oliver St., Boston, Mass.  
 PANCAST & MAULE.....243 & 245 S. 3rd St. Phila.,  
 [See p. xlii.] Pa.  
 SIMMONS, JOHN.....106 to 110 Centre St., New York.  
 [See p. xxix.]  
 TOOMEY, FRANK.....131 N. 3rd St., Phila., Pa.  
 [See inset opp. p. 145.]  
 WHITE & CROWELL.....235 West St., New York.  
 [See p. xxvi.]

**ENGINEERS' TOOLS.**

SIMMONS, JOHN.....106 to 110 Centre St., New York.  
 [See p. xxix.]

**ENGINE FITTINGS.**

SCHÄFFER & BUDENBERG.....40 John St., N. Y.  
 [See p. xxvii.]

**ENGINE GOVERNORS.**

ROBERTS, DWIGHT.....291 W. 11th St., New York.  
 [See p. xxi.]

**ENGINE LATHES.**

Enterprise Machine Co.....Geneva, Ohio.  
 Farmer, Thos. Jr. & Co.....Grand Rapids, Mich.  
 Fifield, Geo. W. Co.....Lowell, Mass.  
 FORSAITH, S. C. & CO.....Manchester, N. H.  
 [see p. xxviii.] & 209 Centre St. New York.  
 HEWES & PHILLIPS IRON WORKS.....Newark,  
 [see p. li.] N. J.  
 HORTON, E. & SON CO.....Windsor Locks, Conn.  
 [see p. xliii.]  
 LOVELL, F. S.....Fitchburg, Mass.  
 [see p. li.]  
 POND, DAVID W.....Worcester, Mass.  
 [see inset opp. p. 205.]  
 POWELL, A. M. & Co.....136 to 140 Union, Worces-  
 [See p. xlix.] ter, Mass.  
 Waymouth, A. D. & Co.....Fitchburg, Mass.  
 Wilkinson, John, Co., The.....77 State St., Chicago,  
 Ill-  
 Young, W. C., & Co.....Worcester, Mass.

**ENGINE PACKING.**

BRANDT, RANDOLPH.....534 Water St., New York.  
 [see p. lii.]

**\* ENGINES.**

BECKETT & McDOWELL MFG. CO.....120 Liberty  
 [see p. xxxix.] St., New York.  
 COOKE & CO.....12 Cortlandt St., New York.  
 [see p. xlii.]  
 FORSAITH, S. C. & CO.....Manchester, N. H. & 209  
 [see p. xxviii.] Centre St., New York.  
 Kirkwood, T. S. & A. J.....171 & 173 Lake St., Chicago,  
 Ills.  
 LEONARD & MCCOY.....118 Liberty St., New York.  
 [see p. xxviii.]  
 MANNING, MAXWELL & MOORE.....111 Liberty  
 [see p. xli.] St., New York.  
 Robinson, S. H. & Co.....119 Haverhill, Boston, Mass.  
 SMITH, H. B., MACHINE CO.....925 Market St.,  
 [see inset opp. p. 154.] Phila., Pa.  
 TOOMEY, FRANK.....131 N. Third St., Phila., Pa.  
 [see inset opp. p. 145.]

**ENGLISH DRILL RODS.**

PRATT & CANDEE.....Hartford, Conn.  
 [see p. xiv.]

**\* ENGRAVERS—PHOTO.**

AMERICAN PHOTO-LITHOGRAPHIC CO.....206  
 [see p. xxxv.] & 298 Broadway, New York.  
 CROSSCUP & WEST ENG. CO.....702 Chestnut St.,  
 [see inset opp. p. 144.] Phila., Pa.  
 MOSS ENGRAVING CO.....535 Pearl St., New York.  
 [see inset opp. p. 112 & 113.]

**\* ENGRAVERS—WOOD.**

CROSSCUP & WEST ENG. CO.....702 Chestnut St.,  
 [see inset opp. p. 144.] Phila., Pa.

**\* ENGRAVING ON WOOD.**

TUTTLE, D. H.....21 Beekman, New York.  
 [see p. l.]

**EVAPORATING COILS.**

GANNON, THOMAS.....66-76 Hudson St., Jersey  
 [see p. xiv.] City, N. J.

**EXHAUSTERS.**

Aland, S., & Co.....Rome, N. Y.  
 Boston Blower Co., 2 Foster's Wharf, Boston, Mass.  
 Sturtevant, B. F.....178 Sudbury St., Boston, Mass.

**EXHAUST FANS.**

Leach, Wm. H.....Uxbridge, Mass.  
 Boston Blower Co., 2 Foster's Wharf, Boston, Mass.

**EXPANDING MANDRELS.**

Le Count, C. W.....South Norwalk, Conn.

**FACING MACHINES.**

BEERS, JAMES M., 25 Whitney Av., New Haven,  
 [see p. viii.] Conn.

**FACTORY SUPPLIES.**

MOTLEY & STERLING.....86 John St., New York.  
 [see p. xxvii.]

**FEED WATER HEATERS.**

ALLEN, WM., & SONS.....Worcester, Mass.  
 [see p. ix.]

**FILE CUTTING MACHINERY.**

Weed, A., & Co.....1609 Spring Garden St., Phila., Pa.

**\* FILES.**

Disston, H., & Sons.....Front & Laurel, Phila., Pa.  
 HOLDEN, H. S.....65-69 S. Canal St., Chicago, Ills.  
 [see p. xv.]  
 New American File Co.....Pawtucket, R. I.

**FINE GRAY IRON CASTINGS.**

Harkins, Thos. B.....Bristol, Pa.

**FIRE & STEAM REGULATORS.**

American Steam Appliance Co.....62 Sudbury St.,  
Boston, Mass.

**FIRE BRICK.**

BORGNER & O'BRIEN.....23rd ab. Race, Phila.  
Pa. [see p. ix.]

**FIRE HYDRANTS.**

CHAPMAN VALVE MFG. CO.....Indian Orchard,  
Mass. [see p. iii.]  
LUDLOW VALVE MFG. CO., 938-954 River St., &  
[see inset opp. p. 219.] 67-83 Vail Av., Troy, N.Y.  
WOOD, R. D. & CO.....400 Chestnut St., Phila., Pa.  
[see p. v.]

**FIRE PROOF VAULTS.**

Snead & Bibb.....710-716 14th St., Louisville, Ky.

**FITTINGS.**

PAUL, GEO. K. & CO., 98 Milk & 2 Bath Sts., Bos-  
ton, Mass.  
[see p. vii.]

**FLANGE PIPE.**

WOOD, R. D. & CO.....400 Chestnut St., Phila. Pa.  
[see p. v.]

**FLEXIBLE SHAFTS.**

STOW FLEXIBLE SHAFT CO, Limited, 1505-1509  
Penna. Ave Phila., Pa. [see inset opp. p. 152.]

**FLUE BRUSHES.**

FLANDERS, L. B. MACHINE WORKS.....1025  
Hamilton St., Phila., Pa. [see p. x.]

**FLUTING MACHINES.**

American Machine Co.....cor. American St. and  
Lehigh ave., Phila., Pa.  
Enterprise Mfg. Co.....Front and Dauphin Sts.,  
Phila., Pa.  
PARSONS & LANDON.....Bridgeport, Conn.  
[see p. xi.]

**\* FOOT LATHES.**

Babbitt, F. S.....Taunton, Mass  
Barnes, W. F. & John.....Rockford, Ill.  
Strange's Cylinder Saw & Machine Co.....Taunton,  
Mass.

**FOOT PRESSES.**

Ferracute Machine Co.....Bridgeton, N. J.  
NEW YORK MACHINE CO.....13 Baxter St., New  
York. [see p. i.]  
Peerless Punch & Shear Co. 43 Dey St., New York.

**FOOT VALVES.**

LUDLOW VALVE MFG. CO., 938-954 River St., &  
[see inset opp. p. 219.] 67-83 Vail Av., Troy, N.Y.

**FORCE PUMPS.**

BULGER, JAMES, Jr.....25 Centre St., New York-  
[see p. vii.]

**FORGED NUT MACHINES.**

Blakeslee, Jno. R.....Cuyahoga Falls, Ohio.

**FORGES.**

Chicago Forge & Bolt Co.....72 Lake St.,  
Chicago, Ill.  
Tromlee, A.....Port Henry, N. Y.

**\* FORGINGS.**

Colorado Iron Works.....Denver, Col.

**\* FOUNDERS.**

NAUGATUCK MACHINE CO. Union City, Conn-  
[see p. xxxvii.]

**FOUNDRY BRUSHES.**

MAHLER, P.....302 Pearl St., New York-  
[see p. xxxix.]  
Strawbridge & Chase.....40 N. 6th St., Phila., Pa.

**\* FOUNDRY FACINGS.**

BICKERTON, T. B. & CO.....12 S. 4th St., Phila..  
Pa. [see p. xxxv.]  
CUTLER & BROWN.....46 Cliff St., New York.  
[see p. xxii.]

**\* FOUNDRY SUPPLIES.**

BICKERTON, T. B. & CO.....12 S. 4th St., Phila.  
Pa. [see p. xxxv.]  
CUTLER & BROWN.....46 Cliff St., New York.  
[see p. xxii.]  
GERMAN & ROBINSON.....12 N. 4th St., Phila., Pa.  
[see p. vii.]

**FRICITION BUFFERS.**

SHAW, T.....915 Ridge ave., Phila., Pa.  
[see p. vii.]

**FRUIT CANNING SOLDER.**

Morrow & Strong.....115 and 117 First St.,  
San Francisco, Cal.  
Trotter, Nathan & Co.....36 N. Front St., Phila., Pa.

**FURNACE LAMPS.**

Tromlee, A.....Port Henry, N. Y.

**FURNACE CASTORS.**

CLARK, G. P.....Windsor Locks, Conn.  
[see p. xlii.]

**\* GALVANIZING IRON**

PHILADELPHIA GALVANIZING CO.....2130 Race  
St. [see p. ix.]

**GALVANIZING WIRE CLOTH.**

PHILADELPHIA GALVANIZING CO.....2130 Race  
St. [see p. ix.]

**\* GAS & STEAM FITTERS' SUPPLIES.**

COOPER, JONES & CALBURY.....1136 Ridge Av.  
Phila., Pa. [see inset opp. p. 155.]

**\* GAS AND STEAM FITTERS' TOOLS.**

READING IRON WORK.....16 and 18 Nth. 5th St.  
Phila., Pa. [see inset opp. p. 154.]

**GAS BURNER LAMPS.**

EXCELSIOR GAS LIGHT AND MFG. CO. 122-128  
Michigan St., Chicago, Ill. [see p. vi.]

**\* GAS FITTINGS.**

FORD & KENDIG.....712 Filbert St., and 1428-32  
Callowhill St., Phila., Pa. [see p. iii.]

**\* GAS FITTERS' SUPPLIES.**

JAMER, JACOBS & Co.....84 John St., New York.  
[see p. xlii.]

**\* GAS FIXTURES.**

Archer & Pancost Mfg. Co.....67 Greene St.,  
New York.

**GAS GATES.**

CHAPMAN VALVE MFG. CO.....Indian Orchard,  
Mass. [see p. iii.]  
PEET VALVE CO.....163 Albany St. Boston, Mass.  
[see p. ii.]

**GAS MACHINES.**

EXCELSIOR GAS LIGHT & MFG. CO.....122-128  
Michigan St., Chicago, Ill. [see p. vi.]

**GAS TESTER FOR MINES.**

SHAW, T.....[see p. vii.] 915 Ridge Av., Phila., Pa.

**GAS WORKS MANUFACTURERS.**EXCELSOR GAS LIGHT & MFG. CO.....122-128  
Michigan St., Chicago, Ill. [see p. vi.]**\*GATES.**SNEAD & CO., IRON WORKS THE.....813 to 839  
W. Market St., Louisville, Ky.  
[see inset opp p. 205.]**GAUGE COCKS.**Bingham Gauge Cock Co., Chauncey Lane, Pitts-  
burg, Pa.  
Cadman, A. W. & Co., Cor. Duquesne Way & 6th  
St., Pittsburgh, Pa.**\*GAUGES.**SCHÄFFER & BUDENBERG.....40 John St. N. Y.  
[See p. xxvii.]SHAW, T.....915 Ridge Ave., Phila., Pa.  
[See p. vii.]**GEARING.**CHESTER STEEL CASTING CO.....407 Library  
St., Phila., Pa. [see p. xxxv.]**GEAR CUTTERS.**HEWES & PHILLIPS IRON WORKS.....Newark,  
N. J. [see p. li.]POND, DAVID W.....Worcester, Mass.  
[see inset opp. p. 205.]POWELL, A. M. & Co.....136-140 Union St., Wor-  
cester, Mass. [see p. xlix.]

Whiton, D. E.....West Stafford, Conn.

**GERMAN SILVER.**OSBORNE & CHEESMAN Co., The.....Ansonia,  
Conn. [see p. xv.]**\*GLUE.**SPRINGFIELD GLUE & EMERY WHEEL Co.,  
28 Taylor St., Springfield, Mass. [see p.  
xxxviii.]**GRAIN DRILLS.**

Janesville Machine Co.....Janesville, Wis.

**GRATE BARS.**American Steam Appliance Co.....62 Sudbury St.,  
Boston, Mass.CRESWELL, DAVID S.....816 Race St., Phila., Pa.  
[See p. xliii.]ASHCROFT, JOHN MFG. CO.....40 John St., New  
York. [see p. xxv.]SALAMANDER GRATE BAR CO...110 Liberty St.  
New York. [see p. xxxi.]**\*GRATES.**PARSONS & LONDON.....Bridgeport, Conn.  
[See p. xl.]

Tromlee, A.....Port Henry, N. Y.

**GRAVITATING TRAPS.**ALBANY STEAM TRAP CO., THE, Albany, N. Y.  
[See p. iv.]**GRAY IRON CASTINGS.**PARSONS & LONDON.....Bridgeport, Conn.  
[See p. xl.]**\*GRINDING MACHINES.**SLATE, DWIGHT.....Hartford, Conn.  
[See p. xxxix.]TANITE CO., THE, Stroudsburg, Monroe Co., Pa.  
[See inside front cover.]**GRINDING MILLS.**NEWELL UNIVERSAL MILL CO., THE, 34  
Cortlandt St., New York.  
[See p. lii.]**GUNPOWDER GAUGES.**SHAW, T.....915 Ridge Ave., Phila. Pa.  
[See p. vii.]**GUNPOWDER PILE DRIVERS.**SHAW, T.....915 Ridge Ave., Phila., Pa.  
[See p. vii.]**\*GUNS.**BOKER, HERMANN & CO.....101 & 103 Duane, &  
91 & 93 Thomas St., N. Y. [See p. xxx.]**HAIR FELTING.**CUTHBERT, THOMAS N., 20 Cortlandt St., N. Y.  
[See p. xxix.]MCNAB & BELDEN.....96 John St., New York.  
[See p. xxix.]**HAND BLOWERS.**EMPIRE PORTABLE FORGE CO., Cohoes,  
New York.  
[See inside back cover.]**\*HAND FILES.**HOLDEN, H. S., 65 & 69 S. Canal St., Chicago, Ills.  
[See p. xv.]**HAND LATHES.**GARVIN, E. E. & CO.....139-143 Centre St., N. Y.  
[See p. xxxviii.]

Thompson, Frank.....168 Centre St., New York.

**HAND POWER PUNCHES.**LYON, E. & CO.....470 Grand St. New York.  
[See p. xxxvi.]

Rice &amp; Whitcomb.....Worcester, Mass.

**HAND TRUCKS.**CLARK, G. P.....Windsor Locks, Conn.  
[See p. xlii.]**HANGERS.**HODSON, G. & J.....226 Arch St., Phila., Pa.  
[see inset opp. p. 222.]**\*HARDWARE.**BOKER, HERMANN & CO.....101 & 103 Duane, &  
91 & 93 Thomas Sts., N. Y. [See p. xxx.]CLARK, G. P.....Windsor Locks, Conn.  
[See p. xlii.]MIDDLETON, W. S.....52 John St., New York.  
[See p. xxviii.]**HARDWARE MANUFACTURERS.**

Athol Machine Co.....Athol, Mass.

McCOY & SANDERS.....43 Chambers St., N. Y.  
[See p. xxx.]Sargeant & Co.....13 Chambers St., N. Y.  
Teller, R. K.....Unadilla, N. Y.**HARDWARE MANUFACTURERS' TOOLS.**ADT, JOHN.....22 Artisan, New Haven, Conn.  
[See p. xxxiii.]**HARROWS.**Kennedy, D.....Saratoga, Ills.  
Penn Harrow Mfg. Co.....Camden, N. J.**HEATERS.**

ALLEN, WM. &amp; SONS [see p. ix]. Worcester, Mass.

**HELIOTYPE PRINTING.**

HELIOTYPE PRINTING CO., The, 211 Tremont  
st., Boston, Mass.  
[see p. xli.; also frontispiece.]

**HIGH SPEED STEAM ENGINES.**

SOUTHWARK FOUNDRY & MACHINE WORKS,  
[see p. xl.] 430 Washington Ave., Phila., Pa.

**HITCHING POSTS.**

PARSONS & LANDON.....Bridgeport, Conn.  
[see p. xl.]

**HOISTING ENGINES.**

BECKETT & McDOWELL MFG. CO., 120 Liberty  
[see p. xxxix.] St., New York

**\* HOISTING MACHINERY.**

CLEM & MORSE.....413 Cherry St., Phila., Pa.  
[see p. xlviii.]  
FRISBIE, D. & CO.....481 Nth. 5th St., Phila., Pa.  
[see p. xvi.]  
Scott, Olin.....Bennington, Vt.  
SMITH, H. B. MACHINE CO., 925 Market St.,  
Phila., Pa. [see inset opp. p. 154.]  
Stokes & Parrish.....3001 Chestnut St., Phila., Pa.  
Walburn, A.....Fort Scott, Kan.

**HOISTS.**

Box, A & Co.....4th and Green St., Phila., Pa.  
Harrington, E. & Son.....1505 Penn. Av., Phila., Pa.  
KIMBALL, C. E.....191 Fort Hill Square, Boston,  
Mass. [see p. xiv.]  
Yale Lock Mfg. Co.....Stamford, Conn

**HOMO. STEEL PLATES.**

COONEY, DANIEL F.....88 Washington St., New  
York. [see p. xxvi.]

**. HORSE NAIL MACHINERY.**

Tromlee, A.....Port Henry, N. Y.

**HOSE.**

NEW YORK BELTING & PACKING CO. 29 Park  
Row, New York. [see p. xxiii.]

**HOT AIR PUMPS.**

CAMMEYER & SAYER, 20 W. Lake St., Chicago,  
Ills., and 93 Liberty St., New York. [see p.  
xxvi.]

**HUB-CENTERING.**

BEERS, JAMES M.....25 Whitney Av., New Haven,  
Conn. [see p. viii.]

**HYDRAULIC GOVERNORS.**

Craig, W. H. & Co.....Lawrence, Mass.

**HYDRAULIC GAUGES.**

LYON, E. & CO.....470 Grand St., New York.  
[see p. xxxvi.]  
SHAW, T.....915 Ridge Av., Phila., Pa. [see p. vii.]

**HYDRAULIC JACKS.**

DUDGEON, RICHARD.....24 Columbia St., New  
York. [see p. xxii.]  
JUSTICE, PHILIP S. & CO.....14 N. 5th St., Phila.,  
Pa. [see p. xxx.]  
LYON, E. & CO.....470 Grand St., New York.  
[see p. xxxvi.]  
McCOY & SANDERS.....43 Chambers, New York.  
[see p. xxx.]

**HYDRAULIC OIL PRESSES.**

HEWES & PHILIPS' IRON WORKS.....Newark,  
N. J. [see p. li.]

**HYDRAULIC PRESSES!**

LYON, E. & CO.....470 Grand St., New York.  
[see p. xxxvi.]

**HYDRAULIC PUNCHES.**

LYON, E. & CO.....470 Grand St., New York.  
[see p. xxxvi.]

**IMPORTERS OF TIN PLATE AND METALS.**

HALL & CARPENTER, 709 Market St., Phila., Pa.  
[see inset opp. p. 155.]

**INDIA RUBBER GOODS.**

WHITE & CROWELL.....235 West St., New York.  
[see p. xxvi.]

**INDICATORS.**

CROSBY STEAM GAGE & VALVE CO., 95 & 97  
Oliver St., Boston, Mass. [see p. viii.]

**: INJECTORS.**

Aland, S. & Co.....Rome, N. Y.  
Jenks, James.....Detroit, Mich.  
NATHAN & DREYFUS.....94 Liberty St., New  
York. [see p. xxvii.]  
PENNSYLVANIA BRASS WORKS.....1512 Spring  
Garden St., Phila., Pa. [see p. xii.]  
RUE MFG. CO.....904 Filbert St., Phila., Pa.  
[see p. xli.]  
SELLERS, WM. & CO.....1600 Hamilton St., Phila.,  
Pa. [see inset opp. p. 153.]

**INSPECTION.—STEAM BOILERS.**

HARTFORD STEAM BOILER INSPECTION &  
INSURANCE CO.....Hartford, Conn. [see  
xvi. and back outside cover.]

**INSPIRATORS.**

Hancock Inspector Co.....34 Beach St., Boston,  
Mass.  
STORER, G. W.....149 N. 3d St., Phila., Pa.  
[see back fly leaf.]

**INSURANCE.—STEAM BOILERS.**

HARTFORD STEAM BOILER INSPECTION &  
INSURANCE CO.....Hartford, Conn. [see  
xvi. and back outside cover.]

**\* IRON. (Fig.)**

MERCHANT & CO.....525 Arch St., Phila., Pa.  
[see inset opp. p. 204.]

**IRON. (Sheet.)**

MERCHANT & CO.....525 Arch St., Phila., Pa.  
[see inset opp. p. 204.]

**IRON & BRASS CASTING.**

Johnson, Lewis.....Julia St., bet. Delta & Water St.,  
New Orleans, La.

**\* IRON & STEEL.**

Ewald Iron Co.....81 N. 2d St., St. Louis, Mo.  
Huntingdon, Hopkins & Co.....Sacramento, Cal.  
BROWN & OWEN.....N. W. cor. 12th & Noble Sts.  
Phila., Pa. [see p. iii.]  
MIDDLETON, W. S.....52 John St., New York.  
[see p. xxviii.]

**IRON BOILER TUBES.**

CARMICHAEL & EMMENS, 130 to 134 Cedar St.,  
New York and 21 to 27 W. Lake St., Chicago,  
Ill. [see p. xxi.]

**IRON BUILDINGS.**

CORNELL, J. B. & J. M.....141 Centre St., New  
York. [see p. xxiii.]  
SNEAD & CO., IRON WORKS.....813 to 839 W. Mar-  
[see inset opp. p. 205.] ket St., Louisville, Ky.

**IRON CASTING.**

Johnson, Isaac G. & Co.....Spuyten Duyvil, New York C ty.

**IRON COCKS & VALVES.**

PANCOAST & MAULE.....243 & 245 So. 3d St., Phila., Pa. [see p. xlii.]

**\*IRON FORGINGS.**

HUBBARD, CHARLES.....46 Cliff St., New York. [see p. xxxvi]

**\*IRON FOUNDERS.**

ANDOVER IRON CO.....407 Walnut St., Phila., Pa. [see p. xlii.]

Athol Machine Co.....Athol, Mass. Bailey, T. R.....Owosso, Mich.

CRESSWELL, DAVID S., 816 Race St., Phila., Pa. [see p. xlii.]

BECKETT & McDOWELL MFG. CO. 120 Liberty St., New York [see p. xxxix.]

BUTTERWORTH & LOWE.....Grand Rapids, Mich.

CHAPMAN VALVE MFG. CO.....Indian Orchard, Mass. [see p. iii.]

CORNELL, J. B. & J. M.....141 Centre St., New York. [see p. xxiii.]

Harkins, Tnos. B.....Bristol, Pa. JONES, S. W.....South Union, Maine. [see inset opp. p. 222.]

Lugg, J. S.....Waynesville, Ohio. NORTH WESTERN MFG. & CAR CO., Stillwater, Minn.

Oneida Iron Works.....Oneida, N. Y. PEET VALVE CO.....163 Albany St., Boston, Mass. [see p. ii.]

Phoenix Iron Works.....Meadville, Pa. SKIDMORE, P. H. & SONS.....Bridgeport, Conn. [see p. xxxi.]

Teller, R. K.....Unadilla, N. Y. Thayer & Ross.....50 Broad St., Boston, Mass.

**IRON FRONTS.**

SNEAD & CO. IRON WORKS, 813-839 W. Market St., Louisville, Ky. [see inset opp. p. 205.]

**IRON GALVANIZING.**

PHILADELPHIA GALVANIZING CO., The, 2130 Race St., Philadelphia, Pa. [see p. ix.]

**IRON GLOBE VALVES.**

READING IRON WORKS.....16 & 18 N. 5th St., Phila., Pa. [see inset opp. p. 154.]

**IRON MANUFACTURERS.**

CARMICHAEL & EMMENS...130 to 134 Cedar St., New York, & 21 to 27 W. Lake, Chicago, Ills. [see p. xxi.]

**\*IRON ORE.**

PULLMAN, J. WESLEY...407 Walnut St., Phila. Pa. [see p. xlii.]

**\*IRON PIPE & FITTINGS.**

COOPER, JONES & CADBURY.....1136 Ridge Av., Phila., Pa. [see inset opp. p. 155.]

**IRON PIPE MANUFACTURERS.**

Abendroth & Root Mfg. Co., 28 Cliff St., New York.

**IRON RAILINGS.**

BROWN & OWEN.....N.W. cor. 12th & Noble sts. Phila., Pa. [see p. iii.]

**IRON ROOFS.**

SNEAD & CO. IRON WORKS, 813-839 W. Market St., Louisville, Ky. [see inset opp. p. 205.]

**IRON STEAM COCKS.**

READING IRON WORKS.....16 & 18 N. 5th St., Phila., Pa. [see inset opp. p. 154.]

**IRON VALVES.**

FORD & KENDIG.....712 Filbert St., Phila., Pa. [see p. iii.]

**\*IRON WORKING MACHINERY.**

POND, DAVID W.....Worcester, Mass. [see inset opp. p. 205.]

POWELL, A. M. & Co., 136-140 Union St., Worcester, Mass [see p. xlix.]

**IRON WORKS.**

CORNELL, J. B. & J. M.....141 Centre St., New York. [see p. xxiii.]

**JAIL WORK.**

SNEAD & CO. IRON WORKS, 813-839 W. Market St., Louisville, Ky. [see inset opp. p. 205.]

**KEY SEAT CUTTERS.**

TREVOR & CO.....Lockport, N. Y. [see inset opp. p. 205.]

**KEYSTONE PORTABLE FORGES.**

KEYSTONE PORTABLE FORGE CO., 204 N. 4th St., Philada., Pa. [see p. xliiv.]

**KEYSTONE PRESSURE & EXHAUST BLOWER.**

KEYSTONE PORTABLE FORGE CO., 204 N. 4th St., Phila., Pa. [see p. xliiv.]

**KNITTING MACHINES.**

Carr, Lewis G.....2227 Trenton Av., Phila., Pa.

**LAMP POSTS.**

CRESSWELL, DAVID S.....816 Race St., Phila., Pa. [see p. xliii.]

Dimond, J. G. & T., 209 & 211 W. 33rd St., New York. PARSONS & LANDON, ...Bridgeport, Conn. [see p. xi.]

WOOD, R. D. & CO., 400 Chesnut St., Phila., Pa. [see p. v.]

**LANTERNS.**

EXCELSIOR GAS LIGHT & MFG. CO.....122 to 128 Michigan St., Chicago, Ill. [see p. vi.]

WILLIAMSON & CASSEDI.....24 S 4th St., Phila., Pa. [see p. xxxvii.]

**LATH MACHINERY.**

Bolton, Newton H.....Minneapolis, Minn. Whitney, Geo. H.....Nashua, N. H.

**\*LATHE CHUCKS.**

Cushman, A. F.....Hartford, Conn. HORTON, E. & SON CO., (The).....Windsor, Locks, Conn. [see p. xlii.]

POND, DAVID W.....Worcester, Mass. [see inset opp. p. 205.]

SWEETLAND & CO [see p. xi.] New Haven, Conn.

**LATHE DOGS.**

Billings & Spencer Co.....Hartford, Conn. Bonney Vis- & Tool Co.....31st and Chestnut Sts., Phila., Pa.

Le Count, C. W.....So. Norwalk, Conn.

**LATHE AND MACHINERY CASTINGS.**

Bramall, Stott & Co.....West Chester, Pa. Brown & Sharpe Mfg. Co.....Providence, R. I.

PARSONS & LANDON.....Bridgeport, Conn. [see p. xi.]

**LATHES.**

- AMES MFG. CO.....Chicopee, Mass.  
[see inset opp. p. 104.]  
COOKE & CO.....12 Cortlandt St., New York.  
[see p. xlii.]  
HEWES & PHILLIPS IRON WORKS...Newark,  
N. J. [see p. ii.]  
LOVELL, F. S.....Fitchburg, Mass.  
[see p. li.]  
OHL, GEO. A. & CO.....212-218 Passaic Ave  
E. Newark, N. J. [see p. xlviii.]  
PLACE, GEO. MACHINERY CO., (The).....122  
Chambers and 103 Reade Sts., New York.  
[see inset opp. p. 8.]  
TALLMAN & McFADDEN, 607 Market St., Phila.,  
[see p. xliii.] Pa.  
Thompson, Frank.....168 Centre St., New York.

**LATHE TOOLS.**

- PRATT & CANDEE.....Hartford, Conn.  
[see p. xiv.]

**LEAD PIPE.**

- SCHOENBERG METAL MFG. CO., (The).....528  
& 530 E. 20th and 525-527 E. 19th Sts. New  
York. [see p. i.]

**LEATHER BELTING.**

- GERMAN & ROBINSON...12 N. 4th St., Phila., Pa.  
[see p. vii.]  
HEIM LEATHER BELTING CO.....33 Ferry St.,  
New York. [see p. xxvii.]  
TOWN & BROTHER.....225 Chestnut St.,  
Phila., Pa. [see p. xxxv.]

**LEVELLERS FOR ENGINE BOILERS.**

- Wilson Bros.....Gorham, N. Y.

**LEVERS.**

- Joyce, Cridland & Co.....Dayton, Ohio.

**LITHOGRAPHERS.**

- AMERICAN PHOTO LITHOGRAPHIC CO.....206  
and 208 Broadway, New York. [see p. xxxv.]

**LOGGING BARS.**

- BUTTERWORTH & LOWE.....Grand Rapids,  
Mich.

**LUBRICANTS.**

- FAUL, W. J.....21 Gold St., New York.  
[see p. xxvi.]

**LUBRICATORS.**

- CROSBY STEAM GAGE & VALVE CO.....95 and  
97 Oliver St., Boston, Mass. [see p. viii.]  
HOLLAND & THOMPSON.....217 River St.,  
Troy, N. Y. [see inset opp. p. 219.]

**MACHINE FORGINGS.**

- BEECHER & PECK.....New Haven, Conn.  
[see p. xi.]

**\*MACHINE SCREWS.**

- AMES MFG. CO.....Chicopee, Mass.  
[see inset opp. p. 104.]  
American Screw Co.....Providence, R. I.

**MACHINE TOOLS.**

- SELLERS, WM. & CO.....1600 Hamilton St., Phila.,  
[see inset opp. p. 153.] Pa.

**MACHINERY BRUSHES.**

- MAHLER, P.....302 Pearl St., New York.  
[see p. xxxix.]

**\*MACHINERY DEALERS.**

- Bailey, T. R.....Owosso, Mich.  
COOKE & CO.....12 Cortlandt St., New York.  
[see p. xlii.]  
FLANDERS, L. B., MACHINE WORKS.....1025  
Hamilton St., Phila., Pa.  
FRISBIE, D. & CO.....481 N. 5th St., Phila., Pa.  
[see p. xvi.]  
Girdwood & McLellan.....Asheville, N. C.  
HINSDALE, CAPT. C. & SON.....34 So. Canal St.,  
Chicago, Ill. [see p. iv.]  
LEONARD & McCOY...118 Liberty St., New York.  
[see p. xxviii.]  
MANNING, MAXWELL & MOORE...111 Liberty  
St., New York. [see p. xlv.]  
MORRIS, I. P. CO.....Richmond & Norris Sts.,  
Phila., Pa. [see p. xi.]  
NATIONAL MFG. CO.....20 & 24 Artisan St., New  
Haven, Conn. [see p. xxxiv.]  
PLACE, GEORGE, MACHINERY CO., THE...122  
Chambers and 103 Reade Sts., New York.  
[see inset opp. p. 8.]  
PRATT & CANDEE.....Hartford, Conn.  
[see p. xiv.]  
Reynolds, E. D.....Butte, Montana.  
ROGERS, C. B. & CO.....109 Liberty St., New York.  
[see p. xliii.]  
Shaw, Kendall & Co.....Toledo, Ohio.  
SMITH, H. B. MACHINE CO.....125 Market St.,  
Phila., Pa. [see inset opp. p. 154.]  
Taber, B. R.....Bowling Green, Ohio.  
TOOMEY, FRANK.....131 N. 3rd St., Phila., Pa.  
[see inset opp. p. 145.]  
WELLS BROS. & CO.....Greenfield, Mass.  
[see inset opp. p. 105.]  
WOOD, R. D. & CO.....400 Chestnut St., Phila., Pa.  
[see p. v.]

**MACHINERY OILS.**

- Thayer & Ross.....50 Broad St., Boston, Mass.

**\*MACHINISTS.**

- Bailey, T. R.....Owosso, Mich.  
BECKER, JOHN.....28 Oliver St., Boston, Mass.  
[see p. xv.]  
BUTTERWORTH & LOWE...Grand Rapids, Mich.  
Caulkins, T. P.....Thornville, Mich.  
Coffee, R. W. & Co.....Big Spring, Va.  
Cunningham & Co.....New Castle, Del.  
FRISBIE, D. & CO.....481 N. 5th St., Phila., Pa.  
[see p. xvi.]  
GARVIN, E. E. & CO.....139-143 Centre St., New  
York. [see p. xxxviii.]  
GOSHEN FOUNDRY & GAS MACHINERY CO.  
39 Dey St., New York, and Goshen, Orange  
Co., N. Y. [see p. xxiv.]  
HANFORD, W.....27 Tremont St., Boston,  
Mass. [see p. xlii.]  
HINSDALE, CAPT. C. & SON.....34 So. Canal St.,  
Chicago, Ill. [see p. iv.]  
Johnson, Lewis.....Julia St., bet. Delta & Water,  
New Orleans, La.  
KIMBALL, C. E.....191 Fort Hill Sq., Boston, Mass.  
[see p. xiv.]  
Lawless, Peter.....32 Front St., Memphis, Tenn.  
Lugg, J. S.....Waynesville, Ohio.  
MANEELY, JOHN...117 & 119 N. 4th St., Phila., Pa.  
[see p. viii.]  
Menzel & Ferguson.....Cor. 3rd St. & 10th Ave.,  
Minneapolis, Minn.  
NATIONAL MFG. CO.....20 & 24 Artisan St., New  
Haven, Conn. [see p. xxxiv.]  
NAUGATUCK MACHINE CO...Union City, Conn.  
[see p. xxxvii.]  
POOL, A. ALEX. & CO.....Newark, N. J.  
[see p. lii.]  
PUTNAM MACHINE COMPANY.....115 Liberty  
St., New York. [see p. xxii.]  
Savill, Will & Bro.....Astoria, Ill.  
Shaw, Kendall & Co.....Toledo, Ohio.  
SWEETLAND & CO.....New Haven, Conn.  
[see p. xi.]  
Teller, R. E.....Unadilla, New York.  
THOMPSON, JAMES R. & CO.....93 John St., New  
York. [see p. xxx.]  
Tromlee, A.....Port Henry, New York.



**MACHINISTS' CLAMPS.**

Le Count, C. W. .... So. Norwalk, Conn.

**MACHINISTS' PATTERN & BRAND LETTERS.**

VANDERBURGH, WELLS & CO. .... 16 & 18 Dutch.  
[See p. iii.] ..... and 110 Fulton, New York.

**MACHINISTS' SPECIAL MACHIN-ERY.**

BEECHER & PECK ..... New Haven, Conn.  
[See p. xl.]

**\* MACHINISTS' SUPPLIES.**

BECKETT & McDOWELL MFG. CO. .... 120 Liberty  
[See p. xxxix.] ..... St., New York.  
BICKERTON, T. B. & CO. .... 12 S. 4th, Phila., Pa.  
[See p. xxxv.] .....  
BRANDT RANDOLPH. 534 Water St., New York.  
[See p. lii.] .....  
BROWN & OWEN ..... N. W. cor. 12th & Noble Sts.  
[See p. lii.] ..... Phila., Pa.  
COOKE & CO. .... 12 Cortlandt St., New York.  
[See p. xlii.] .....  
EMPIRE PORTABLE FORGE Co. .... Cohoes, N. Y.  
[See inside back cover.] .....  
Huntington, Hopkin\* & Co. .... Sacramento, Cal.  
LANCASTER MFG. CO. .... 85 & 97 Liberty St., New  
[See p. xlix.] ..... York.  
McCOY & SANDERS. 43 Chambers St., New York.  
[See p. xxx.] .....  
MAHLER, P. .... 302 Pearl St., New York.  
[See p. xxxix.] .....  
MANEELY JOHN. 117 & 119 N. 4th St., Phila., Pa.  
[See p. viii.] .....  
MARCELLUS, C. N. & CO. .... 69 Varick St., New  
[See p. v.] ..... York.  
MIDDLETON, W. a. .... 62 John St., New York.  
[See p. xxviii.] .....  
PRATT & CANDEL. [See p. xiv.] Hartford, Conn.  
PRENTISS, H. & CO. .... 42 Dey St., New York.  
[See p. xxix.] .....  
ROGERS, C. B. & CO. .... 109 Liberty St., New York.  
[See p. xxiii.] .....  
ROGERS, H. A. .... 19 John St., New York.  
[See p. xxv.] .....  
RYAN, J. J. & Co. .... 59 S. Canal St., Chicago, Ill.  
[See p. xxxvii.] .....  
Shaw, Kendall & Co. .... Toledo, Ohio.  
Taber, B. R. .... Bowling Green, Ohio.  
TALLMAN & McFADDEN. 607 Market St. Phila.,  
Pa. [See p. xliii.] .....  
WILLIAMSON & CASSEDDY. 24 S. 4th St., Phila.,  
[See p. xxxvii.] ..... Pa.

**MACHINISTS' TOOL MFRS.**

SWEETLAND & CO. .... New Haven, Conn.  
[See p. xi.]

**\* MACHINISTS' TOOLS.**

American Tool Co. .... Cleveland, Ohio.  
AMES MFG. CO. .... Chicopee, Mass.  
[See inset opp. p. 104.] .....  
Bonney Vise & Tool Co. .... 3015 Chestnut St., Phila.,  
Pa. ....  
Ballard, E. P. .... 14 Dey St., New York.  
Cady, Geo. L. .... Lowell, Mass.  
Eaton, Cole & Burnham Co. .... Bridgeport, Conn.  
Enterprise Machine Co. .... Geneva, Ohio.  
FURSAITH, S. C. & CO. .... Manchester, N. H., & 209  
Centre St., New York. [See p. xxviii.] .....  
Gale, G. R. .... Cleveland, Ohio.  
HORTON, E. & SON CO. (The) .... Windsor Locks,  
[See p. xiii.] ..... Conn.  
LOVELL, F. S. [See p. ii.] ..... Fitchburg, Mass.  
MANNING, MAXWELL & MOORE .... 111 Liberty  
[See p. xli.] ..... St., New York.  
MOTLEY & STERLING. 86 John St., New York.  
[See p. xxvii.] .....  
NATIONAL MFG. Co. .... 20 & 24 Artisan St., New  
[See p. xxxiv.] ..... Haven, Conn.  
National Tool Co. .... Williamsport, Pa.  
New Haven Mfg. Co. .... New Haven, Conn.

**\* MACHINISTS' TOOLS—Continued.**

OHL, GEO. A. & CO. .... 212 to 218 Passaic Ave., N.-w-  
[See p. xlviii.] ..... ark, N. J.  
PLACE, GEO. MACHINERY CO. (The) 122 Cham-  
[See inset opp. p. 8.] ..... bers St., & 103 Reade  
St., New York.  
POND, DAVID W. .... Worcester, Mass.  
[See inset opp. p. 205.] .....  
POOL, A. ALEX. & CO. [see p. lii.] Newark, N. J.  
POWELL, A. M. & CO., 136-140 Union St., Wor-  
[see p. xlix.] ..... cester, Mass.  
Pratt & Whitney Co. .... Hartford, Conn.  
PRENTISS, H. & CO. [see p. xxix.] 42 Dey St., N. Y.  
PUTNAM MACHINE CO. .... 115 Liberty St., N. Y.  
[See p. xxii.] .....  
SELLERS, WM. & CO., 1600 Hamilton, Phila., Pa.  
[See inset opp. p. 153.] .....  
Seneca Tool Works. .... Dundee, New York.  
SKIDMORE, P. H. & SON. .... Bridgeport, Conn.  
[See p. xxxi.] .....  
SMITH, H. B. MACHINE CO. .... 325 Market St.,  
[See inset opp. p. 154.] ..... Phila., Pa.  
Starrett, L. S. .... Athol, Mass.  
STOW FLEXIBLE SHAFT CO., Limited, 1505-09  
[See inset opp. p. 152.] Penn. Av., Phila., Pa.  
TAFT, GEO. C. 31 S. Bridge St., Worces-ter, Mass.  
[See p. i.] .....  
TALLMAN & McFADDEN. 607 Market St. Phila.,  
Pa. [See p. xliii.] .....  
TOOMEY, FRANK. .... 131 N. 3rd St., Phila., Pa.  
[See inset opp. p. 145.] .....  
WELLS, BROS. & Co. .... Greenfield, Mass.  
[See inset opp. p. 105.] .....  
Wilkinson (The) John Co. .... 77 State St., Chicago,  
Ill.

**MALLEABLE IRON FITTINGS.**

MARCELLUS, C. N. & CO. .... 69 Varick St., N. Y.  
[See p. v.] .....  
READING IRON WORKS. .... 16 & 18 N. 5th St.,  
[See inset opp. p. 154.] ..... Phila., Pa.

**MALLEABLE & LIGHT GREY IRON CASTINGS.**

Torrance, Merriam & Co. .... Troy, N. Y.

**MANTLE FRAMES.**

PARSONS & LONDON. .... Bridgeport, Conn.  
[See p. xi.]

**MANUFACTURERS' SUPPLIES.**

ANDRES, H. [see p. xxxv.] 24 N. 4th St., Phila., Pa.  
Besley, C. H. & Co. .... 175 Lake St., Chicago, Illa.  
BREWER, D. & CO. .... 42 N. 6th St., Phila., Pa.  
[See p. xi.] .....  
LEONARD & McCOY, 118 Liberty St., New York.  
[See p. xxviii.] .....  
TOWN & BRO. .... 225 Chestnut St., Phila., Pa.  
[See p. xxxv.] .....  
Wardell & Htnckley. .... 14 S. Canal, Chicago, Illa.

**MECHANICAL PAPERS.**

AGE OF STEEL. .... 513 Olive St., St. Louis, Mo.  
[See inset opp. p. 161.] .....  
AMERICAN MACHINIST. .... 96 Fulton St., N. Y.  
[See inset opp. p. 9.] .....  
AMERICAN MANUFACTURER AND IRON  
WORLD, 55 Ninth St., Pittsburg, Pa.  
[See inset opp. p. 160.] .....  
SCIENTIFIC AMERICAN. .... 261 Broadway, N. Y.  
[See front fly leaf.]

**MERCHANT IRON MFRS.**

Portage Iron Co., Limited, .... Duncansville, Pa.

**MERCHANT STEEL AND IRON.**

KENT, D. H. & Co., Limited. 1009 Arch St., Phila.  
Pa. [See front fly leaf.]

**MERCURY GAUGES.**

SHAW, T., [see p. vii.] .... 915 Ridge Av., Phila., Pa.

**METAL DEALERS.**

Anderson, B. C. .... 87 Peck Slip, New York.  
 CARTER, EDWARD, [see p. xl.] Ansonia, Conn.

**METAL PAINT.**

Davis Metal Paint Co. .... Chattanooga, Tenn.

**METALS.**

Morrow & Strong, 115 & 117 First St., San Francisco, Cal.

**METALLIC PACKING.**

KATZENSTEIN, L. .... 169 Christopher St., N. Y.  
 [see p. xxv.]

**MILL SUPPLIES.**

ROGERS, H. A., [see p. xxv.] .... 19 John St., N. Y.

**MILLING MACHINE CHUCKS.**

HORTON, E. & SON Co., The. .... Windsor Locks, Conn.  
 [see p. xiii.]

**MILLING MACHINES.**

Brown & Sharpe Mfg. Co. .... Providence, R. I.  
 Colorado Iron Works. .... Denver, Col.  
 GARVIN, E. E. & CO. .... 139-143 Centre St., N. Y.  
 [see p. xxxviii.]  
 Lipe, C. E. .... Syracuse, N. Y.  
 Newton, C. C. .... 2341 Callowhill St., Phila., Pa.  
 POND, DAVID W. .... Worcester, Mass.  
 [see inset opp. p. 205.]  
 POOL, A. ALEX. & CO. .... Newark, N. J.  
 [See p. liii.]  
 POWELL, A. M. & CO., 136 to 140 Union St., Worcester, Mass.  
 [See p. xlix.]  
 SLATE, DWIGHT. .... Hartford, Conn.  
 [See p. xxxix.]

**MINE CARS.**

Watt Mining Car Wheel Co. .... Barnesville, Ohio.

**MINING MACHINERY.**

BECKETT & McDOWELL MFG. CO., 120 Liberty St., New York.  
 [See p. xxxix.]  
 Blake Crusher Co. .... New Haven, Conn.  
 Colorado Iron Works. .... Denver, Col.  
 Excelsior Iron Works, 87 N. Clinton St., Chicago, Ill.  
 Gates Iron Works. .... 52 Canal St., Chicago, Ill.  
 Lane & Bodley Co., John & Water Sts., Cincinnati, Ohio.  
 MIDDLETON, W. S. .... 52 John St., New York.  
 [See p. xxviii.]  
 Reynolds, E. D. .... Butte, Montana.  
 Walburn, A. W. .... Fort Scott, Kansas  
 WYOMING VALLEY MFG. Co., Wilkes-Barre, Pa.  
 [see inset opp. p. 219.]

**MINING AND MECHANICAL ENGINEERS.**

Stearns, T. B. .... 115 Liberty St., New York.

**MODELS.**

BECKER, JOHN, .... 28 Oliver St., Boston, Mass.  
 [See p. xv.]

**MORTISING MACHINES.**

BEERS, JAMES M., 25 Whitney ave., New Haven, Conn.  
 [See p. viii.]

**MOTORS FOR LIGHT AND HEAVY MACHINERY.**

Couch, B. M. .... Northampton, Mass.  
 ELECTRO DYNAMIC CO., 121 S. 3d St., Phila., Pa.  
 [See insets opp. p. 138 & 139.]

**MOULDING SAND.**

CUTLER & BROWN, .... 46 Cliff St., New York.  
 [See p. xxii]

**MOWING MACHINES.**

Janesville Machine Co. .... Janesville, Wis.

**NAIL MANUFACTURERS.**

Portage Iron Co. .... Duncansville, Pa.

**NAME PLATES FOR MACHINERY.**

ADAMSON, S. E. .... 9 Murray St., New York.  
 [See p. xxxiv.]

**NARROW GAUGE & MINE LOCOMOTIVES.**

WYOMING VALLEY MFG. Co., Wilkes-Barre, Pa.  
 [see inset opp. p. 219.]

**NICKEL SEATED SAFETY VALVES.**

CONSOLIDATED SAFETY VALVE CO., 111 Liberty St., N. Y., and 51 & 53 Sudbury, Boston, Mass.  
 [See p. xlii.]

**NIPPLES.**

Robinson Machine Co. .... Poughkeepsie, N. Y.

**NITRO-GLYCERINE BLASTING POWDER.**

REPAUNO CHEMICAL CO., .... 305 Walnut St., Phila. Pa.  
 [see inset opp. p. 218.]

**NOISE QUIETING NOZZLES.**

SHAW, T. .... 915 Ridge Ave., Phila. Pa.,  
 [See p. vii.]

**NUT TAPPING MACHINES.**

Boynnton & Plummer. .... Worcester, Mass.  
 Brown & Sharpe Mfg. Co. .... Providence, R. I.  
 Howard Bros. .... Fredonia, N. Y.  
 Reeve & Son. .... Cleveland, Ohio.

**OILS.**

FAUL, W. J. .... 71 Gold St., New York.  
 [See p. xxvi.]

**OIL CUPS.**

HOLLAND & THOMPSON, 217 River St., Troy, New York.  
 [see inset opp. p. 219.]

**OPERA CHAIRS.**

PARSONS & LANDON. .... Bridgeport, Conn.  
 [See p. xi.]

**OVERFLOW BASINS.**

ROBINSON, C. E. & CO., 31 E. 10th St., New York.  
 [See p. v.]

**OVERHEAD RAILWAYS.**

KIMBALL, C. E. .... 191 Fort Hill Square, Boston, Mass.  
 [See p. xiv.]

**PACKING.**

GERMAN & ROBINSON. .... 12 North 4th St., Phila., Pa. [See p. vii.]  
 NEW YORK BELTING & PACKING Co., 29 Park Row, New York. [See p. xxiii.]

**PAINTS.**

ASBESTOS FELTING WORKS, .... 108 Liberty St., New York. [see p. xxvi.]

**PAPER CUTTERS.**

Stillman, T. V. & V. C. .... Westerly, R. I.

**PAPER CUTTING PRESSES.**

AMES MFG. Co. .... Chicopee, Mass.  
 [See inset opp. p. 104.]

**PATENT PORTABLE MILLING MACHINES.**

FLANDERS, L. B. MACHINE WORKS,  
1025 Hamilton St., Phila., Pa. [See p. x.]

**PATENT RIBBED PIPE.**

AUSTIN, OBDYKE & Co., 1705 Chestnut St. Phila.,  
Pa. [See p. vii.]

**PATENTS.**

MUNN & CO., 261 Broadway, New York.  
[See front fly leaf.]

**PATENT SASH WEIGHTS.**

PARSONS & LANDON, Bridgeport, Conn.  
[See p. xl.]

**PATENT SELF OILERS AND LUBRICATORS.**

NATHAN & DREYFUS, 94 Liberty St., New York.  
[See p. xxvii.]

**PATENT SHEARS.**

LYON, E. & Co., 470 Grand St., New York.  
[See p. xxxvi.]

**PATENT STEEL HUBS.**

FLANDERS, L. B. MACHINE WORKS, 1025  
Hamilton St., Phila., Pa. [See p. x.]

**PATTERN LETTERS.**

ADAMSON, S. E., 7 Murray St. New York.  
[See p. xxxiv.]

VANDEBURGH, WELLS & Co., 110 Fulton & 16  
& 18 Dutch Sts., New York. [See p. lii.]

**PATTERN NAME PLATES.**

BECKER, JOHN, 28 Oliver St., Boston, Mass.  
[See p. xv.]

**PERFORATED METALS.**

AITCHISON, ROBERT, (The) PERFORATED  
METAL Co., 292 & 294 State St., Chicago, Ill.  
[See p. xxxix.]

DREYFUSS, BERNARD, 75 to 81 Duane St.,  
New York. [See p. xxii.]

**PHOSPHOR BRONZE.**

KAUFFMAN, A., 36 Park Place, New York.  
[See p. xxviii.]

PHOSPHOR-BRONZE SMELTING Co., (The)  
512 Arch St., Phila., Pa. [See p. xlviii.]

**PHOSPHOR TIN.**

KAUFFMAN, A., 36 Park Place, New York.  
[See p. xxviii.]

**PHOTO ELECTROTYPING.**

PHOTO ELECTROTYPE ENG. & MFG. CO., 63  
Oliver St., Boston, Mass. [See inset opp. p. 1.]

**PHOTO ENGRAVING.**

AMERICAN PHOTO LITHOGRAPHIC Co., 206 &  
208 Broadway, New York. [See p. xxxv.]

BOSTON PHOTO ENGRAVING Co., 11 Cornhill,  
Boston, Mass. [See p. xlv.]

CROSSCUP & WEST ENG. Co., 702 Chestnut St.,  
Phila., Pa. [See inset opp. p. 144.]

HELIOTYPE PRINTING Co., (The) 211 Tremont  
St., Boston, Mass. [See p. xli, also frontis-  
piece.]

MOSS ENGRAVING Co., 635 Pearl St., New York.  
[See inset opp. pp. 112 and 113.]

PHOTO ELECTROTYPE ENG. & MFG. CO., 63  
Oliver St., Boston, Mass. [See inset opp. p.  
1.]

PHOTO ENGRAVING Co., 67 Park Place, New  
York. [See back fly leaf.]

**PHOTO LITHOGRAPHERS.**

AMERICAN PHOTO LITHOGRAPHIC Co., 206 &  
208 Broadway, New York. [See p. xxxv.]

**PHOTOTYPE PRINTS.**

GUTEKUNT, F., 832 & 834 Arch St., Phila., Pa.  
[See inside back cover.]

**PIG IRON.**

HUBBARD, CHARLES, 46 Cliff St., New York.  
[See p. xxvi.]

MORRIS, WHEELER & Co., 1608 Market St.,  
Phila., Pa. [See p. xviii.]

**PIPE CUTTERS.**

LANCASTER MFG. CO., 95 & 97 Liberty St., New  
York. [See p. xlix.]

Saunders D. & Sons, Yonkers, New York.

**PIPE CUTTING MACHINERY.**

PANCOAST & MAULE, 243 & 245 S. 3rd St., Phila-  
delphia, Pa. [See p. xlii.]

Saunders, D. & Sons, Yonkers, N. Y.

**PIPE LINE GAUGES.**

SHAW, T., 915 Ridge Av., Philadelphia, Pa.  
[See p. vii.]

**PIPE REAMERS.**

LANCASTER MFG. CO., 95 & 97 Liberty St.,  
New York. [See p. xlix.]

Morris, Ta-ker & Co., 5th & Tasker Sts., Phila-  
delphia, Pa.

**PIPING TOOLS.**

Howard Iron Works, Buffalo, New York.

KIMBALL, C. E., 191 Fort Hill Square, Boston,  
Mass. [See p. xiv.]

Saunders, D. & Sons, Yonkers, New York.

**PLANER CHUCKS.**

Heckendorn & Wilhelm, Reading, Pa.

POND, DAVID W., Worcester, Mass.  
[See inset opp. p. 205.]

Stevens Vise Co., 41 Dey St., New York.

**PLANER CHUCKS. [Greenwood's Universal.]**

FLANDERS, L. B. MACHINE WORKS, 1025 Ham-  
ilton St., Philadelphia, Pa. [See p. x.]

**PLANERS.**

AMES MFG. CO., Chicopee, Mass. [See inset  
opp. p. 104.]

NEW HAVEN MFG. CO., New Haven, Conn.

PLACE GEORGE MACHINERY Co., (The), 122  
Chambers & 103 Reade Sts., New York. [See  
inset opp. p. 8.]

LOVELL, F. S., Fitchburg, Mass. [See p. li.]

**PLANERS & SHAPERS.**

COOKE & CO., 12 Cortlandt St., New York. [See  
p. xlii.]

Enterprise Machine Co., Geneva, Ohio.

Hendy Machine Co., Wolcottville, Conn.

HEWES & PHILLIPS' IRON WORKS, Newark, N.  
J. [See p. li.]

Rowley & Hermance, Williamsport, Pa.

White, Jno. A., Concord, N. H.

**PLANING MACHINES.**

BEERS, JAMES M., 25 Whitney Av., New Haven,  
Conn. [See p. viii.]

POND, DAVID W., Worcester, Mass.  
[See inset opp. p. 205.]

POWELL, A. M. & Co., 136 & 140 Union St., Wor-  
cester, Mass. [See p. xlix.]

**PLUMBERS.**

PEET VALVE CO., 163 Albany St., Boston, Mass.  
[See p. ii.]

**PLUMBERS' MATERIALS.**

- CREQUE, RONALDS & CO., 54 Cliff St., New York.  
[See p. viii.]  
TAVIS, JOHN & CO., 69 to 79 Michigan St., Chicago, Ill. [See p. ii.]  
HARRISON, CHARLES & CO., 16 W. 4th St., New York. [See p. vi.]

**PLUMBERS' SUPPLIES.**

- BROWN & OWEN, N. W. cor. 12th & Noble Sts., Philadelphia, Pa. [See p. iii.]  
BULGER, JAMES, JR., 25 Centre St., New York. [See p. vi.]  
Huntington, Hopkins & Co., Sacramento, Cal.  
JAMER, JACOBS & CO., 84 John St., New York, & 148 First St., Brooklyn, E. D. N. Y. [See p. xiv.]  
KNAPP MFG. CO., 22 & 24 Frankfort St., New York. [See p. xxvii.]  
MANEELY, JOHN, 117 & 119 N. 4th St., Philadelphia, Pa. [See p. viii.]  
OSBORNE & CHEESMAN CO., Ansonia, Conn. [See p. xv.]  
RYAN, J. J. & CO., 59 S. Canal St., Chicago, Ill. [See p. xxxvii.]

**PLUMBERS' TOOLS.**

- ARMSTRONG, F., Bridgeport, Conn. [See inset opp. p. 8.]

**POLISHERS' SUPPLIES.**

- SPRINGFIELD GLUE & EMERY WHEEL CO., 24 Taylor St., Springfield, Mass. [See p. xxxviii.]

**POLISHING MACHINERY.**

- LYON, E. & CO., 470 Grand St., New York. [See p. xxxvi.]

**PORTABLE CRANK PIN MACHINES.**

- FLANDERS, L. B., MACHINE WORKS, 1025 Hamilton St., Philadelphia, Pa. [See p. x.]

**PORTABLE DRILLS.**

- STOW FLEXIBLE SHAFT CO. LIMITED, 1505 & [see inset opp. p. 152.] 1509 Penna. Av., Phila., Pa.

**PORTABLE FORGES.**

- ANDRES, H., 24 N. Fourth St., Phila., Pa. [see p. xxxv.]  
Buffalo Forge Co., Buffalo, N. Y.  
EMPIRE PORTABLE FORGE CO., Cohoes, N. Y. [see inside back cover.]  
Holt Mfg. Co., Cleveland, Ohio.

**PORTABLE GAS WORKS.**

- EXCELSIOR GAS LIGHT & MFG. CO., 122 to 128 [see p. vi.] Michigan St., Chicago, Ill.

**POWER, HAND & FOOT PRESSES.**

- ADT, JOHN, 22 Artisan St., New Haven, Conn. [see p. xxxiii.]

**POWER PRESSES.**

- NEW YORK MACHINE CO., 13 Baxter St., New York. [see p. i.]

**POWER PUNCHES.**

- Colton, G. D. & Co., Galesburg, Ill.  
Doty Mfg. Co., Janesville, Wis.

**PRESSURE REGULATORS.**

- Curtis Regulator Co., 59 Beverly St., Boston, Mass.

**PUDDLED BARS.**

- Seyfert, S. R., Reading, Pa.

**PULLEY BLOCKS.**

- Harrington, F. & Sons, 1505 Penn Ave., Phila., Pa.  
McCOY & SANDERS, 43 Chambers St., New York. [see p. xxx.]  
Yale Lock Mfg. Co., New Haven, Conn.

**PULLEYS.**

- HODSON, G. & J., 226 Arch St., Phila., Pa. [see inset opp. p. 222.]

**PULLEYS & SHAFTING.**

- BECKETT & McDOWELL MFG. CO., 120 Liberty St., New York. [see p. xxxix.]

**PULP GRINDERS.**

- Tromlee, A., Port Henry, New York.

**PUMPING ENGINES.**

- CAMMEYER & SAYER, 93 Liberty St., New York. [see p. xxvi.] & 29 W. Lake, Chicago, Ill.

**PUMPING MACHINERY.**

- Rumsey, L. M., Mfg. Co., St. Louis, Mo.

**PUMPS.**

- Douglass, W. & B., Middletown, Conn.  
Marshall, G. M. & Son, Kilbourn City, Wisconsin.  
PARSONS & LANDON, Bridgeport, Conn. [see p. xi.]  
ROBERTSON, G. W., 156 N. Fifth St., Phila., Pa. [see inset opp. p. 222.]

**PUNCHES.**

- Doty Mfg. Co., Janesville, Wis.  
DUDGEON, RICHARD, 24 Columbia St., New York. [see p. xxii.]

**\*PUNCHES & SHEARS.**

- Doty Mfg. Co., Janesville, Wis.  
Peerless Punch & Shear Co., 38 Dey St., New York.  
POND, DAVID W., Worcester, Mass. [see inset opp. p. 205.]  
Rice & Whitcomb, Worcester, Mass.

**PUNCH & SHEARS COMBINED.**

- LANCASTER MFG. CO., 95 & 97 Liberty St., New York. [see p. xlix.]

**PUNCHING PRESSES.**

- Peerless Punch & Shear Co., 38 Dey St., New York.

**RADIATORS.**

- PAUL, GEO. K., & CO., 98 Milk and 2 Bath Sts., Boston, Mass. [see p. vii.]  
READING IRON WORKS, 16 & 18 N. Fifth St., Phila., Pa. [see inset opp. p. 154.]

**RAILINGS.**

- Dimond, J. G. & T., 209 & 211 W. 33rd St., New York.  
SNEAD & CO. IRON WORKS, 813 & 39 W. Market [see inset opp. p. 205.] St., Louisville, Ky.

**RAIL ROAD BRAKE SHOES.**

- LANCASTER MFG. CO., 95 & 97 Liberty St., New York. [see p. xlix.]

**\* RAIL ROAD SUPPLIES.**

- BICKERTON, T. B. & CO., 12 S. 4th St., Phila. Pa. [see p. xxxv.]  
BROWN & OWEN, N. W. cor. 12th & Noble Sts., Phila., Pa. [see p. iii.]  
EMPIRE PORTABLE FORGE CO., Cohoes, New York. [see inside back cover.]  
Huntington, Hopkins & Co., Sacramento, Cal.  
KNAPP MFG. CO., 22 and 24 Frankfort St., New York [see p. xxvii.]  
McCOY & SANDERS, 43 Chambers Street, New York [see p. xxx.]  
MANEELY, JOHN, 117 & 119 N. 4th St., Phila., Pa. [see p. viii.]

**\* RAIL ROAD SUPPLIES—Continued,**

- MANNING, MAXWELL & MOORE, 111 Liberty St., New York [see p. xlv.]  
 MIDDLETON, W. S., 52 John St., New York. [see p. xxviii.]  
 PRENTISS, H. & CO., 42 Dey St. New York [see p. xxix.]  
 ROGERS, H. A., 19 John St., New York [see p. xxv.]  
 Shaw, Kendall & Co., Toledo, Ohio.  
 VANDERBILT & HOPKINS, 120 Liberty St., New York [see p. xxii.]  
 WILLIAMSON & ASSEDY, 24 S. 4th St., Phila., [see p. xxxvii.] Pa.

**RAILWAY TOOLS.**

- PRENTISS, H. & CO., 42 Dey St., New York [see p. xxix.]

**RATCHETS.**

- ASHCROFT MFG. CO., 111 Liberty St., New York [see p. xlv.]

**RAW HIDE BELTING & LACE.**

- SPRINGFIELD GLUE & EMERY WHEEL CO., 28 Taylor st., Springfield, Mass. [see p. xxxviii.]

**REAPING & SEEDING MACHINES.**

- Janesville Machine Co., Janesville, Wis.

**RELIEF PLATES.**

- MOSS ENGRAVING CO., 535 Pearl St., New York. [see inset opp. pp. 112 & 113.]

**RELIEF VALVES (WATER.)**

- CONSOLIDATED SAFETY VALVE CO., 111 Liberty St., New York, 51 & 53 Sudbury, Boston, Mass. [see p. xlv.]

**RIVETING MACHINERY.**

- ADT, JOHN, 22 Artisan St., New Haven, Conn. [see p. xxxiii.]

**RIVET MACHINES.**

- Farrell Foundry & Machine Co., Waterbury, Conn.

**RIVETS.**

- Allentown Rolling Mill Co., Allentown, Pa.  
 American Screw Co., Providence, R. I.  
 Fuller Bros., & Co., 139 Greenwich St., New York  
 Hoopes & Townsend, 1330 Buttonwood St., Phila., Pa.

**ROLLERS & HANGERS.**

- Arnold & Co., Norwalk, Conn.  
 Dennis, E. & Co., Jackson, Mich.  
 Durkee & Doe, 40 S. Canal, Chicago, Ills.  
 Hawkins, Wm., 34 M. & E. R. Ave., Newark, N. J.  
 Maslin, J. & Son, 199 Greene St., Jersey City, N. J.

**ROLLER TUBE EXPANDERS.**

- DUDGEON, RICHARD, 24 Columbia St., New York. [see p. xxii.]

**ROLLING MILLS.**

- MANEELY, JOHN, 117 & 119 N. 4th St., Phila., Pa. [see p. lviii.]  
 Ewald Iron Co. Tennessee Rolling Works, office 801 N. 2nd St., St. Louis, Mo.

**ROOFING-ASBESTOS.**

- ASBESTOS FELTING WORKS, 108 Liberty, New York. [see p. xxi.]  
 JOHNS, H. W. Mfg Co., 97 Maiden Lane, New York. [see p. xxi.]

**ROOFING & PAVING MATERIALS.**

- NEW, T., 32 John Street, New York [see p. xxix.]

**ROOFING FELT.**

- WHITE & CROWELL, 235 West St., New York. [see p. xxvi.]

**ROTARY BLEACHERS.**

- Tippett & Wood, Phillipsburg, N. J.

**RUBBER BELTING.**

- GERMAN & ROBINSON, 12 N. 4th St., Phila., Pa. [see p. vii.]

**RUBBER GOODS. (Belting, &c.)**

- GREENE, TWEED & CO., 118 Chambers St., New York. [see p. xxv.]  
 LEONARD & MCCOY, 118 Liberty St., New York. [see p. xxviii.]  
 TOWN & BROTHER, 235 Chestnut St., Phila., Pa. [see p. xxxv.]  
 WILLIAMSON & CASSEDY, 21 S. 4th St., Phila., Pa. [see p. xxxvii.]

**RUBBER WHEELS.**

- CLARK, G. P., Windsor Locks, Conn. [see p. xlv.]

**SAFETY VALVES.**

- CROSBY STEAM GAGE CO., 95 & 97 Oliver St., Boston, Mass. [see p. viii.]

**SAFETY VALVES "POP."**

- CONSOLIDATED SAFETY VALVE CO., 111 Liberty St., New York, and 51 & 53 Sudbury St., Boston, Mass. [see p. xlv.]

**SASH WEIGHTS.**

- Baltimore Smelting Works, 2 York St., Baltimore, Md.  
 SNEAD & Bibb, 710 to 716 14th St., Louisville, Ky.  
 SNEAD & CO. IRON WORKS, 815 to 839 Market St., Louisville, Ky. [see inset opp. p. 205.]

**SAW MFRS.**

- AMERICAN SAW CO., Trenton, N. J. [see p. xliii.]  
 Disston, Henry & Sons, Tacony, Pa.

**SCHOOL HOUSE FURNITURE.**

- PARSONS & LONDON, Bridgeport, Conn. [see p. xi.]

**SCIENTIFIC BOOKS.**

- BAIRD, HENRY CAREY & CO., 810 Walnut St., Phila., Pa. [see p. i.]  
 FARLEY, PAUL & BAKER, 530 Market & 523 Minor Sts., Phila., Pa. [See back fly leaf, also inset opp. p. 283.]  
 SPON, E. & F. N., 44 Murray St., New York. [see p. xxi.]  
 VAN NOSTRAND, D., 23 Murray & 27 Warren Sts., New York. [see p. ix.]

**SCREW JACKS.**

- Dudgeon, Richard, 24 Columbia St., New York.  
 Joyce, Cridland & Co., Dayton, Ohio.  
 LOVELL, F. S., Fitchburg, Mass. [see p. li.]  
 OHL, GEO. A. & CO., 212-218 Passaic Ave., Newark, N. J. [see p. xlviii.]

**SCREW PLATES.**

- LANCASTER MFG. CO., 95 & 97 Liberty St., New York. [see p. xlix.]  
 WELLS BROS. & CO., Greenfield, Mass. [see inset opp. p. 105.]  
 WILEY & RUSSELL MFG. CO., Greenfield, Mass. [see inset opp. p. 105.]

**\* SCREWS (Machine).**

Cady, Jno. L.....Lowell, Mass.  
Chicago Screw Co., Cor. Washington & Desplaines  
Sts., Chicago, Ill.  
Shapleigh, T. W. & Co.....30 Hanover St., Boston,  
Mass.  
Hartford Machine Screw Co.....Hartford, Conn.  
Worcester Machine Screw Co.....Worcester, Mass.

**SCREW WRENCHES.**

Coes & Co.....Worcester, Mass.  
Girard Wrench Mfg. Co.....Girard, Pa.

**SEAMLESS TUBING.**

Benedict & Bunham Mfg. Co.....96 Church St.,  
New York.  
MERCHANT & CO.....525 Arch and 520 Cherry  
Sts., Phila., Pa. [see inset opp. p. 204.]

**SEWING MACHINE MOTORS.**

ELECTRO-DYNAMIC CO., 121 So. 3rd St., Phila.,  
Pa. [see inset opp. pages 138 & 139.]

**SEWING MACHINES.**

Carr, Lewis G.....2227 Trenton Ave., Phila., Pa.  
PARSONS & LANDON.....Bridgeport, Conn.  
[see p. xl.]

**\* SHAFTING.**

CRESSON, GEO. V.....Cor. 18th & Hamilton, Sts.,  
[see p. xii.] Phila., Pa.  
GOSHEN FOUNDRY & GAS MACHINERY CO.,  
Goshen, Orange Co., N. Y., and 39 Dey St.,  
[see p. xxiv.] New York.  
HODSON, G. & J.....226 Arch St., Phila., Pa.  
[see inset opp. p. 222.]  
LOVELL, F. S., [see p. li.].....Fitchburg, Mass.  
SELLERS, WM. & Co., 1600 Hamilton St., Phila.,  
[see inset opp. p. 153.] Pa.  
STOW FLEXIBLE SHAFT CO, Limited, 1505-1509  
[see inset opp. p. 152.] Penna. Ave., Phila., Pa.  
Wood, Thos.....2106 Wood St., Phila., Pa.

**SHAFTING & GEARING.**

Couch, B. M.....Northampton, Mass.  
HEWES & PHILLIPS IRON WORKS.....Newark,  
[see p. li.] N. J.

**SHAFTING, PULLEYS & HANGERS.**

Akron Iron Co.....Akron, Ohio.  
Alcott, T. & Son.....Mount Holly, N. J.  
Brown, A. & T.....43 Park St., New York.  
Dennis, E. & Co.....Jackson, Mich.  
Dodge, Frederick.....Syracuse, N. Y.  
Dutkee & Doe.....40 So. Canal St., Chicago, Ill.  
Farmer, Thos. Jr. & Co.....Grand Rapids, Mich.  
Great Western Mfg. Co.....Leavenworth, Kansas.  
Hashow, Maish & Davis.....Minneapolis,  
Minnesota.  
Hawkins, William.....54 & 56 M. & E. R. R. Ave.,  
Newark, N. J.  
Hoff, Fontaine & Abbott.....1162 N. 3d St., Phila., Pa.  
Holeman, H. Dudley & Bro.....Magnolia, cor. Clara,  
New Orleans, La.  
LOVELL, F. S.....Fitchburg, Mass. [see p. li.]  
Lowell, A. H.....Manchester, N. H.  
Lynchburg Foundry & Machine Co.....Lynchburg,  
Va.  
McElroy & Armitage.....Keokuk, Iowa.  
Maslin, J. & Son.....199 Greene St., Jersey City, N. J.  
Novelty Iron Works.....Dubuque, Iowa.  
Poole & Hunt.....7 German St., Baltimore, Md.  
Prybily, P.....461 to 467 W. 40th St., New York.

**SHAVING MACHINES.**

BEERS, JAMES M.....25 Whitney Ave., New Haven,  
Conn. [see p. viii.]

**SHEARS.**

Peerless Punch & Shear Co.,.....38 Dey St., New  
York.

**SHEET BRASS.**

OSBORNE & CHEESMAN Co. (THE).....Ansonia  
Conn. [see p. xv.]

**SHEET IRON WORKS.**

Leetonia Boiler Works.....Leetonia, Ohio.

**SHEET IRON WORKERS.**

Abendroth & Root Mfg. Co.....28 Cliff St. New  
York.

**SHEET LEAD.**

SCHOENBERG METAL MFG. CO. (The).....528 &  
530 E. 20th St., New York. [see p. l.]

**SHINGLE HEADING AND STOVE  
MACHINERY.**

TREVOR & CO.....Lockport, N. Y.  
[see inset opp. p. 205.]

**SIDEWALK LIGHTS.**

SNEAD & CO. IRON WORKS (THE).....813 to 839  
W. Market, W., Louisville, Kentucky.  
[see inset opp. p. 205.]

**SILVER PLATERS' BRUSHES.**

MAHLER, P.....302 Pearl St. New York. [see p.  
xxxix.]

**SINKS.**

PARSONS & LANDON.....Bridgeport, Conn. [see  
p. xl.]

**SKYLIGHTS.**

Demond, J. G. & T., 209 & 211 W. 33d St., New York.  
SNEAD & CO. IRON WORKS, 813 to 839 W. Market  
St., Louisville, Ky. [see inset opp. p. 205]

**SLIDE VALVES.**

LUDLOW VALVE MFG. CO.....938-954 River St.,  
and 67-83 Vail Ave., Troy, New York.  
[see inset opp. p. 219.]

**SLOTTERS.**

HEWES & PHILLIPS, IRON WORKS.....Newark,  
N. J. [see p. li.]

**SOLDER.**

SCHOENBERG METAL MFG. CO. (THE.) 528 &  
530 E. 20th St., New York. [see p. l.]

**SPECIAL MACHINERY.**

SLATE, DWIGHT.....Hartford, Conn.  
[See p. xxxix.]

**SPECIAL TOOLS.**

BECKER, JNO.....28 Oliver St. Boston, Mass.  
[See p. xv.]

**SPEED INDICATORS.**

Montgomery & Co.....95 Fulton St., New York.  
NAUGATUCK MACHINE CO., Union City, Conn.  
[See p. xxxvii.]

**SPOKE TENONING.**

BEERS, JAMES M. 25 Whitney Ave., New Haven,  
Conn. [See p. viii].  
Coffee, R. W.....Big Spring, Va.

**STEAM BLOWERS.**

WATERTOWN STEAM BLOWER CO., 95 & 97.  
[See p. xix.] Liberty St., N. Y.

**STEAM BOILER FEED PUMP.**

FOX, IRVING W.....Rochester, Min.

**STEAM BOILER INSPECTION.**

HARTFORD STEAM BOILER INSPECTION & INSURANCE CO.....Hartford, Conn.  
[See p. xvi and back outside cover].

**STEAM BOILER INSURANCE.**

HARTFORD STEAM BOILER INSPECTION AND INSURANCE CO.....Hartford, Conn.  
[See p. xvi. and back outside cover.]

**STEAM BROOM MACHINERY.**

Lipe, Chas. E.....Syracuse, N. Y.

**STEAM CHEST SEAT PLANING MACHINES.**

FLANDERS, L. B., MACHINE WORKS, 1025 Hamilton St., Phila., Pa.  
[See p. x].

**STEAM ENGINE BUILDERS.**

MORRIS, I. P. CO.....Richmond & Norris Sts.  
[See p. xi]. Phila. Pa.  
SKIDMORE, P. H. & SONS.....Bridgeport, Conn.  
[See p. xxxi].

**STEAM ENGINE GOVERNORS.**

Craig, W. H. & Co.....Lawrence, Mass.  
Gardner, Robt. W.....Quincy, Ill.  
Matteson, Bros.....Moline, Ill.  
ROBERTS, DWIGHT.....291 W. 11th St., New York.  
[See p. xxi.]

**STEAM ENGINE INDICATORS.**

ASHCROFT, MFG. CO., 111 Liberty St. New York.  
[See p. xlv.]  
Rogers, H. A.....19 John St., New York.

**STEAM ENGINES.**

GOSHEN FOUNDRY & GAS MACHINERY CO.  
29 Dey St., N. Y., & Goshen, Orange Co., N. Y.  
[See p. xxiv.]  
PUTNAM MACHINE CO.....115 Liberty St., N. Y.  
[See p. xxii.]

**STEAM ENGINES AND PUMPS.**

BRANDT, RANDOLPH, 534 Water St., New York.  
[See p. li.]

**STEAM FIRE ENGINES.**

SKIDMORE, P. H. & Son.....Bridgeport, Conn.  
[See p. xxxi.]

**STEAM FITTERS.**

HINSDALE, CAPT. C. & SON.....34 S. Canal St.  
[See p. iv.] Chicago, Ill.  
MANEELY, JOHN.....117 & 119 N. 4th St., Phila.,  
[See p. viii.] Pa.  
Shaw, Kendall & Co.....Toledo, Ohio.

**\*STEAM FITTERS' SUPPLIES.**

BROWN & OWEN.....N. W. cor. 12th & Noble Sts.  
[See p. iii.]  
MARCELLUS C. N. & Co.....69 Varick St., N. Y.  
[See p. v.]

**\*STEAM FITTINGS.**

CHAPMAN VALVE MFG. CO., Indian Orchard.  
[See p. iii.] Mass.  
FORD & KENDIG.....N. 712 Filbert St., Phila. Pa.  
[see p. iii.]  
HAY & PRENTICE, 34 & 36 S. Canal St., Chicago.  
[See p. v.] Ill.

**STEAM & GAS FITTERS.**

PEET VALVE CO., 163 Albany St., Boston, Mass.  
[see p. ii.]

**\*STEAM & GAS FITTERS' TOOLS.**

ASHCROFT MFG. CO., 111 Liberty St., New York.  
[see p. xlv.]  
FORD & KENDIG, 712 Filbert St., Phila., Pa. [see  
p. iii.]  
PANCOST & MAULE, 243 & 245 S. 3rd St., Phila.,  
Pa. [see p. xlii.]  
Saunders, D. & Son.....Yonkers, N. Y.

**STEAM, GAS & WATER PIPE.**

NATIONAL TUBE WORKS CO., McKeesport,  
Pa. [see p. ii.]

**STEAM GAUGES.**

ASHCROFT, JOHN MFG. CO., 40 John St., New  
York [see p. xxv.]  
ASHCROFT MFG. CO.....111 Liberty St., New York.  
[see p. xlv.]  
CROSBY STEAM GAGE & VALVE, 95 & 97  
Oliver St., Boston, Mass [see p. viii.]  
Lamon, Geo. & Co.....Pueblo, Col.

**STEAM GENERATORS.**

Bate, W. T. & Son.....Conshohocken, Pa.  
Rice, C. B. & Co.....Chicago, Ills.

**STEAM HAMMERS.**

Bell, David.....Buffalo, N. Y.  
Long & Alstatter Co., The.....Hamilton, Ohio.  
SELLERS, WM. & CO., 1600 Hamilton St., Phila.,  
[see inset opp. p. 153.]  
Pa.  
Williams, White & Co.....Moline, Ill.

**\*STEAM HEATING APPARATUS.**

PANCOAST & MAULE, 243 & 245 S. 3rd St., Phila.,  
Pa. [see p. xlii.]  
PAUL, GEO. K. & CO.....98 Milk St., & 2 Bath  
St., Boston, Mass. [see p. vii.]  
WOOD, JAMES P. & CO., 39 S. 4th St., Phila., Pa.  
[see p. viii.]

**STEAM HOISTING.**

FRISBIE, D. & CO., 481 N. 5th St., Phila., Pa. [see  
p. xvi.]

**\*STEAM PACKING.**

ASBESTOS FELTING WORKS, 108 Liberty St.,  
New York [see p. xxvi.]  
BICKERTON, T. B. & Co., 12 S. 4th St., Phila., Pa.  
[see p. xxxv.]  
JOHNS, H. W. MFG. CO., 87 Maiden Lane, New  
York [see p. xxxi.]  
WILLIAMSON & CASSEDY, 24 S. 4th St., Phila.,  
Pa. [see p. xxxvii.]

**STEAM PUMPS.**

Hawkins, Wm, 54 & 56 M. & E. R.R. Ave., Newark,  
N. J.  
Royce & Pulling.....Columbus, Ohio.  
VALLEY MACHINE CO., Easthampton, Mass.  
[see p. xvi.]  
Wells, F. & C., 116 to 122 S. Clinton St., Chicago,  
Ills.

**STEAM RADIATORS.**

Giffing, A. A. Iron Co., Canal St., near Communi-  
paw Av., Jersey City, N. J.  
Schenck, J. N.....Plainfield, N. J.

**STEAMSHIP SUPPLIES.**

WILLIAMSON & CASSEDY, 24 S. 4th St., Phila.,  
Pa. [see p. xxxvii.]

**STEAM TRAPS.**

ALBANY STEAM TRAP CO. (The)....Albany, New  
York.  
ASHCROFT MFG. CO.....111 Liberty St., New York.  
[See p. xlv.]

**STEAM & VACUUM GAUGES.**

ASHCROFT MFG. CO...111 Liberty St., New York  
[See p. xlvii.]

**\*STEAM VALVES.**

CHAPMAN VALVE MFG. CO.....Indian Orchard, Mass.  
[See p. iii.]  
PEET VALVE CO...163 Albany St., Boston, Mass.  
[See p. ii.]

**STEAM WARMING APPARATUS.**

HAY & PRENTICE...34 & 36 S. Canal St., Chicago, Ills.  
[See p. v.]

**STEAM & WATER GAUGES.**

READING IRON WORKS.....16 & 18 N. 5th St., Phila., Pa.  
[See inset opp. p. 154.]

**STEEL.**

MIDVALE STEEL CO.....12 N. 5th St., Phila., Pa.  
[See inset opp. p. 145.]  
MORRIS, WHEELER & CO.....1608 Market St., Phila., Pa.  
[See p. xviii.]  
PRATT & CANDEE, [See p. xiv.]...Hartford, Con.

**STEEL BOILER PLATES.**

HUBBARD, CHAS.....46 Cliff St., New York.  
[See p. xxxvi.]

**\*STEEL CASTINGS.**

CHESTER STEEL CASTINGS CO .....407 Library St., Phila., Pa., Woras, Chester, Pa.  
[See p. xxxv.]  
HUBBARD, CHAS.....46 Cliff St., New York.  
[See p. xxxvi.]  
MIDVALE STEEL CO.....12 N. 5th St., Phila., Pa.  
[See inset opp. p. 145.]

**STEEL FORGINGS.**

HUBBARD, CHAS.....46 Cliff St., New York.  
[See p. xxxvi.]  
MIDVALE STEEL CO.....12 N. 5th St., Phila., Pa.  
[See inset opp. p. 145.]

**STEEL MFRS.**

Joliet Steel Co.....Chicago, Ills.

**STEEL PUNCHES.**

ADAMSON, S. E.....9 Murray St., New York.  
[See p. xxxiv.]

**STEEL STAMPS.**

ADAMSON, S. E.....9 Murray St., New York.  
[See p. xxxiv.]

**STEEL TUBES.**

JUSTICE, PHILIP S. & CO.....14 N. 5th St., Phila., Pa.  
[See p. xxx.]

**STEEL TUBE CLEANERS.**

RUFFNER & DUNN.....Falls of Schuylkill, Phila., Pa.  
[See p. xxxviii.]

**STILLS—COPPER.**

GANNON, THOMAS...66 to 76 Hudson St., Jersey City, N. J.  
[See p. xiv.]

**STOCKS & DIES.**

ARMSTRONG, F.....Bridgeport, Conn.  
[See inset opp. p. 8.]

**STREET LAMPS.**

EXCELSIOR GAS LIGHT & MFG. CO...122 to 128 Michigan St., Chicago, Ills.  
[See p. vi.]

**SUGAR APPARATUS.**

GANNON, THOMAS...66 to 76 Hudson St., Jersey City, N. J.  
[See p. xiv.]

**SUGAR MACHINERY.**

LANCASTER MFG. CO...95 & 97 Liberty St., New York.  
[See p. xlix.]

**SUMMER PIECES.**

PARSONS & LANDON.....Bridgeport, Conn.  
[see p. xl.]

**SURFACE CONDENSERS.**

GANNON, THOMAS... 66 to 76 Hudson St., Jersey City, N. J. [see p. xiv.]

**SURFACE GAUGES.**

Starrett, L. S.....Athol, Mass.

**TAGS.**

DENNISON MFG CO.....21 Milk St., Boston, Mass., and 630 Chestnut St., Phila., Pa.; 143 Walnut St., Cincinnati Ohio; 198 Broadway, New York; 155 Dearborn St., Chicago Ill.; 412 N. 3rd St., St. Louis. [see p. xlvii., also back of cover.]

**TANITE EMERY WHEELS.**

Andrews, E. & Sons.....Williamsport, Pa.  
Atk ns, E. C. & Co.....206 to 216 South Illinois St., Indianapolis, Ind.  
Bradlee, Hastings & Co.....112 to 118 Oliver St., Boston, Mass.  
Buck, M. M. & Co.....209 N. 3rd St., St. Louis, Mo.  
Champlin & Spencer.....152 and 154 Lake St., Chicago, Ill.  
Curtis & Co. Mfg. Co.....40 Franklin St. Chicago, Ill.  
Curtis & Co. Mfg. Co.....811 to 819 N. 2nd St., St. Louis Mo.  
Ewing, M tchell & Co.....137 First Ave., Pittsburg, Pa.  
Gregory, H. P. & Co.....2 & 4 California St., San Francisco, Cal.  
Gregory, H. P. & Co.....43 Front St., Portland, Oregon.  
Kerrick, J. H. & Co.....254 2nd Ave., South Minneapolis, Minn.  
Macey & Co.....58 West Side Public Square, Nashville, Tenn.  
Miller, L. W. & Co., cor. Union and St. Charles Sts. New Orleans, La.  
Morton, Reed & Co.....59 and 61 German St., Baltimore, Md.  
Nottingham, T. J. Mfg. & Supply Co.....cor. Pearl and Plum Sts., Cincinnati, Ohio.  
PRENTISS, H. & CO.....42 Dey St., New York.  
[see p. xxix.]  
SMITH, H. B. MACHINE CO.....925 Market St., Phila., Pa. [see inset opp. p. 154.]  
TANITE CO., (The) Stroudsburg, Monroe Co., Pa. [see inside front cover.]  
Vonnegut, Clemens.....184 and 186 E. Washington St., Indianapolis, Ind.  
Wilson & Rogers.....316 and 318 Robert St., St. Paul, Minn.

**TANKS.**

ALLEN, WM. & SONS.....Worcester, Mass.  
[see p. ix.]

**TAPS & DIES.**

Niagara Stamping & Tool Co.....Buffalo, N. Y.  
PRENTISS, H. & CO.....42 Dey St., New York.  
[see p. xxix.]  
TALLMAN & McFADDEN...607 Market St., Phila., Pa.  
[see p. xliii.]  
Walburn, A. W.....Fort Scott, Kansas.  
WELLS BROS. & CO.....Greenfield, Mass.  
[see inset opp. p. 105.]  
WILEY & RUSSELL MFG. CO.....Greenfield, Mass.  
[See inset opp. p. 105.]



**TELEGRAPH WIRE.**

ROEBLING'S, JNO. A. SONS CO., (The).....117  
and 119 Liberty St., New York. [see p. xxxii.]

**TEST GAUGES.**

SHAW, T.....915 Ridge Ave., Phila., Pa.  
[see p. vii.]

**TEST PUMPS.**

SHAW, T.....915 Ridge Ave., Phila., Pa.  
[See p. vii.]

**THERMOMETERS.**

SCHÄFFER & BUDENBERG.....40 John St.  
New York. [see p. xxvii.]

**TINNERS' MACHINERY & TOOLS.**

MERCHANT & CO.....525 Arch St., Phila., Pa.  
[see inset opp. p. 204.]

**TOOL & MACHINERY STEEL.**

MIDVALE STEEL CO.....12 N. 5th st., Phila., Pa.  
[See inset opp. p. 145.]  
PRATT & CANDEE, [see p. xiv.] Hartford, Conn.

**TOOL FRMS.**

POOL, A. ALEX. & Co., [see p. lii.] Newark, N. J.  
Standard Tool Co.....Athol, Mass.

**TOOLS.**

Bailey, T. R.....Owosso, Mich.  
KIMBALL, C. E.....191 Fort Hill Sq., Boston, Mass.  
[see p. xiv.]  
N. Y. MACHINE CO.....13 Baxter St., New York.  
[see p. i.]  
Peerless Punch & Shear Co., 38 Dey St., Phila., Pa.

**TOOL STEEL.**

HUBBARD, CHARLES.....46 Cliff St., New York.  
[see p. xxxvi.]

**TRIP & DROP HAMMERS, POWER & MANUEL.**

LANCASTER MFG. CO.....95 & 97 Liberty St.,  
[see p. xlix.] New York.

**TUBE CLEANERS.**

CHALMERS-SPENCE & CO.....23 John St.,  
[see p. xxviii.] New York.  
Schenck, J. N.....Plainfield, N. J.

**TUBES.**

MERCHANT & CO.....525 Arch St., Phila., Pa.  
[see inset opp. p. 204.]

**TUBING.**

NATIONAL TUBE WORKS CO., McKeesport, Pa.  
[see i.]  
NEW YORK BELTING & PACKING CO., 29 Park  
[see p. xlii.] Row, New York.  
OSBORNE & CHEESMAN CO.....Ansonia, Conn.  
[see p. xv.]

**\* TURBINE WATER WHEELS.**

Alcott, T. C. & Son.....Mount Holly, N. J.  
Cole, R. D. & Co.....Newman, Ga.  
Cunningham & Co.....New Castle, Pa.  
Malone Foundry Co.....Malone, N. Y.  
Marshall, G. M. & Son.....Kilbourn City, Wis.  
Mellert Foundry & Machine Co.....Reading, Pa.  
Poole & Hunt.....7 German St., Baltimore, Md.  
Scott, Olin.....Bennington, Vt.  
Whitney, Geo. H.....Nashua, N. H.

**TURNING TABLES.**

SELLERS, WM. & CO.....1600 Hamilton St., Phila., Pa.  
[see inset opp. p. 153.]

**TUYERE IRONS.**

EMPIRE PORTABLE FORGE CO...Cohoes, N. Y.  
[see inside back cover.]  
Buffalo Forge Co.....Buffalo, N. Y.

**TWIST DRILLS.**

BREWER, D. & CO.....42 N. Sixth St., Phila., Pa.  
[see p. xl.]

**TYPE METAL.**

SCHOENBERG METAL MFG. CO.....528 and 530 E.  
[see p. i.] Twentieth St., New York.

**VACUUM GAUGES.**

SHAW, T.....915 Ridge Ave., Phila., Pa.  
[see p. vii.]

**VACUUM PANS.**

GANNON, THOMAS.....66 to 76 Hudson St., Jersey  
[see p. xiv.] City, N. J.

**VALVES.**

CHAPMAN VALVE MFG. CO.....Indian Orchard,  
[see p. lii.] Mass.  
Cincinnati Pump Co.....123 & 125 E. Pearl St.,  
Cincinnati, Ohio.  
CROSBY STEAM GAGE & VALVE CO.....95 and 97  
[see p. viii.] Oliver St., Boston, Mass.  
Eaton, Cole & Burnham Co.....Bridgeport, Conn.  
Eddy Valve Co.....Waterford, N. Y.  
Jenkins Bros.....71 John St., New York.  
Lamon, George, & Co.....Pueblo, Col.  
LUDLOW VALVE MFG. CO.....938 to 954 River St.,  
[see inset opp. p. 219.] Troy, N. Y.  
McNab & Harlin Mfg. Co.....Paterson, N. J.  
PARSONS & LANDON.....Bridgeport, Conn.  
[see p. xl.]  
PEET VALVE CO.....163 Albany St., Boston, Mass.  
[see p. ii.]  
Ross Valve Co.....Troy, New York

**VALVE WHEELS.**

PARSONS & LANDON.....Bridgeport, Conn.  
[see p. xl.]

**VENEER CUTTING MACHINERY.**

HEWES & PHILLIPS' IRON WORKS.....Newark,  
[see p. li.] New Jersey.

**VENEER SAWS.**

Dexter, A. M.....Mattapoisett, Mass.

**VENTILATING APPARATUS.**

WOOD, JAMES P., & CO.....39 S. Fourth St., Phila.,  
[see p. viii.] Penna.

**VENTILATORS.**

COOPER, JONES & CADBURY.....1136 Ridge Ave.,  
[see inset opp. p. 155.] Phila., Pa.

**VERANDAHs.**

SNEAD & CO., IRON WORKS.....813 to 839 W. Mar-  
ket St., Louisville, Ky. [see inset opp. p. 205.]

**VICES.**

Bonney Vise & Tool Co.....31st & Chestnut Sts.,  
Phila., Pa.  
FISHER & NORRIS.....Trenton, N. J.  
[see p. xix.]  
LOVELL, F. S.....Fitchburg, Mass.  
[see p. li.]  
Miller's Falls Co.....Miller's Falls, Mass.  
Parker, Charles, Co.....Meriden, Conn.  
Trenton Vise & Tool Co.....Trenton, N. J.

**WALRUS LEATHER.**

GREENE, TWEED & CO.....118 Chambers St.,  
[see p. xxv.] New York.

**WASTE.**

WILLIAMSON & CASSEDY.....24 S. Fourth St.,  
[see p. xxxvii.] Phila., Pa.  
O'Neill, Charles.....6 N. Second St., Phila., Pa.

**WATER GATES.**

CHAPMAN VALVE MFG. CO., Indian Orchard,  
Mass. [see p. iii.]  
PEET VALVE CO., 163 Albany st., Boston, Mass.  
[see p. ii.]

**WATER TIGHT CELLARS.**

NEW, T.....32 John St., New York. [see p. xxix.]

**WATER TUBE STEAM BOILERS.**

BABCOCK & WILCOX CO., 30 Cortlandt St., New  
York [see p. xxv.]

**WATER VALVES.**

CHAPMAN VALVE MFG. CO., Indian Orchard,  
Mass. [see p. iii.]  
PEET VALVE CO., 163 Albany St., Boston, Mass.  
[see p. ii.]

**WATER WHEELS.**

Leffel, Jas. & Co.....Springfield, Ohio.  
Marshall, G. M. & Son...Kilbourn City, Wisconsin.

**WELL FIXTURES.**

PARSONS & LANDON...Bridgeport, Conn. [see p.  
xl.]

**WHEEL PRESS GAUGES.**

SHAW, T.....915 Ridge Av., Phila., Pa. [see p. vii.]

**WHIP SPIKES.**

PARSONS & LANDON, Bridgeport, Conn. [see p.  
xl.]

**WICK, PISTON & FLAT PACKING.**

GILMOUR, R. M., 82 John St., New York [see p.  
xlv.]

**WIND GATE.**

BEECHER & PECK, .....New Haven, Conn. [see  
p. xl.]

**WIND MILLS.**

Marshall, G. M. & Son, Kilbourn City, Wisconsin.

**WIRE.**

ROEBLING'S, JOHN A. SONS' CO., The, 117 & 119  
Liberty St., New York [see p. xxxii.]

**WIRE-BARB.**

ROEBLING'S, JNO. A. SONS' CO., The, 117 & 119  
Liberty St., New York [see p. xxxii.]

**WIRE-BRASS.**

OSBORNE & CHEESMAN CO., Ansonia, Conn.  
[see p. xv.]

**WIRE CLOTH.**

ROEBLING'S, JOHN A. SONS' CO., The, 117 & 119  
Liberty St., New York [see p. xxxii.]

**WIRE CLOTH, GALVANIZED.**

PHILADELPHIA GALVANIZING CO., The, 2130  
Race St., Phila., Pa. [see p. ix.]

**WIRE CUTTING MACHINERY.**

ADT, JOHN, 22 Artisan St., New Haven, Conn.  
[see p. xxxiii.]

**WIRE FORMING MACHINERY,  
VARIOUS.**

ADT, JOHN.....22 Artisan St., New Haven, Conn.  
[see p. xxxiii.]

**WIRE-GERMAN SILVER.**

OSBORNE & CHEESMAN CO., Ansonia, Conn.  
[see p. xv.]

**WIRE GOODS.**

Kilby & Voss, ... 67 & 69 W. Monroe, Chicago, Ills

**WIRE ROPE.**

ROEBLING'S, JOHN A. SONS' CO., The, 117 &  
119 Liberty St., New York [see p. xxxii.]

**WIRE STRAIGHTENING  
MACHINERY.**

ADT, JOHN, 22 Artisan St., New Haven, Conn. [see  
p. xxxiii.]  
Trenton Iron Co.....Trenton, N. J.

**WOOD PLANERS.**

GARVIN, E. E. & Co., 139-143 Centre St., New  
York. [see p. xxxviii.]

**WOOD PULP GRINDERS.**

TREVOR & CO.....Lockport, N. Y.  
[see inset opp. p. 205.]

**\* WOOD WORKING MACHINERY.**

Bailey, T. R.....Owosso, Mich.  
BEERS, JAMES M., New Haven, Conn. [see p.  
viii.]  
Couch, B. M.....Northampton, Mass.  
Fay, J. A. & Co., 207 & 209 Lake St., Chicago, Ills.  
FORSATH, S. C. & CO., Manchester, N. H., and  
209 Centre St., New York [see p. xxviii.]  
PLACE, GEORGE, MACHINERY CO., The, 122  
Chambers & 103 Reade Sts., New York. [See  
inset opp. p. 8.]  
Robinson, S. H. & Co., 119 Haverhill St., Boston,  
Mass.  
ROGERS, C. B. & CO., 109 Liberty St., New York.  
[see p. xxiii.]  
Royle, Jno. & Sons.....Paterson, N. J.  
SMITH, H. B. MACHINE CO., 925 Market St.,  
Phila., Pa. [see inset opp. p. 154.]  
Teller, R. K.....Unadilla, N. Y.  
Woods, S. A. Machine Co., 61 S. Canal St. Chicago,  
Ills.

**WRENCHES.**

AMERICAN SAW CO., Trenton, N. J. [see p. xlv.]  
Bemis & Call.....Springfield, Mass.  
Coes, L. & Co.....Worcester, Mass.  
LANCASTER MFG. CO., 95 & 97 Liberty St., New  
York [see p. xlix.]

**WROUGHT IRON.**

CARR, A.....62 John St., New York [see p. vi.]

**\* WROUGHT IRON FITTINGS.**

PANCOAST & MAULE, 243 & 245 S. 3rd St.,  
Phila., Pa. [see p. xlii.]  
READING IRON WORKS, 16 & 18 N. 5th St.,  
Phila., Pa. [see inset opp. p. 154.]

**WROUGHT IRON PIPE.**

BROWN & OWEN, N. W. cor. 12th & Noble Sts.  
Phila., Pa. [see p. iii.]  
DAVIS, JOHN & CO., 69-79 Michigan St., Chicago,  
Ills. [see p. v.]  
FORD & KENDIG, 712 Filbert Street, Phila., Pa.  
[see p. iii.]  
HAY & PRENTICE, 34 & 36 S. Canal St. Chicago,  
Ill. [see p. v.]  
MANELEY, JOHN, 117-119 N. 4th St., Phila., Pa.  
[see p. viii.]  
MARCELLUS, C. N. & CO., 69 Varick St., New  
York [see p. v.]  
NATIONAL TUBE WORKS CO., McKeesport,  
Pa. [see p. ii.]  
PANCOAST & MAULE, 243 & 245 S. 3rd St., Phila.  
Pa. [see xlii.]  
PAUL, GEO. K. & CO., 98 Milk & 2 Bath Sts.,  
Boston, Mass., [see p. vii.]  
READING IRON WORKS, 16 & 18 N. 5th St.,  
Phila., Pa. [see inset opp. p. 154.]  
SIMMONS, JOHN, 106, 108 & 110 Centre St., New  
York [see p. xxix.]

**WROUGHT STEEL WAGON  
SKEINS.**

Emmick & Hatcher.....Columbus, Ohio.

**SUPERIOR TO ANY OTHER METHOD.**

**Thirteen Years' Practical Experience.**

**LARGEST ESTABLISHMENT OF THE KIND IN THE WORLD.**

The  
**MOSS ENGRAVING CO.**  
MORE NEW ENGLAND  
**535 PEARL ST.**  
CORNER ELM  
One Block from B'way.  
**NEW YORK.**

The advertisement is enclosed in a decorative border. On the left, a circular vignette depicts a deer standing in a wooded landscape. Below it, a rectangular vignette shows a sailboat on the water. To the right of the rectangular vignette is a small illustration of a vase with flowers. The text is arranged in a central column, with the company name in large, ornate letters at the top.

***Portraits, Buildings, Machinery, Land-  
scapes, Animals, Plants, Jewelry:***

# PHOTO-ENGRAVING.

---

**Engraved Relief Plates**, by our new process, are of two kinds—one, on hard metal, like the usual stereotype plate; the other, the *electro-plate*, the same in quality as the ordinary electrotype. These plates are produced by a photo-chemical process, and are, for finish and workmanship, fully equal to hand work—with this advantage, however, in their favor, that they can render quite perfectly either the effect of a wood engraving, steel engraving, crayon drawing or lithograph.

They are mounted on blocks type high, and require precisely the same preparation for the press as any electrotype or wood cut, and will print equally well on wet or dry paper. For economy, and for adaptability to every variety of design and artistic conception—pen drawings, charcoal sketches, rough draughts with pencil and crayon, wood engravings, steel plates and lithographs, all being faithfully and graphically rendered—its immense advantage over work by the old methods is apparent.

**Copy.**—Whenever finished drawings are furnished us for reproduction, they should be from artists with some experience in this kind of work. The copy should be clear, the lines black, and all parts carefully and sharply defined, for in general we can do little more than exactly reproduce the original. Changes may be made and defects remedied, but it is better to have the copy once for all just right.

**Photographs and Pencil Sketches.**—When engravings are desired of photographs, slight sketches or pale designs by pencil or pen, we have first to put them into the hands of our own artists, to be carefully re-drawn with thoroughly black ink on Bristol board or other specially prepared paper. It is necessary, in most cases, that the drawings should be double the size of the required engraving. This ensures greater perfection of detail, finer lines, and more thoroughness of execution generally.

**Designs by our own Artists.**—With the ample facilities at our command, we can furnish suitable designs, when desired, from the slightest sketch, and often from verbal description—the design being of course, submitted to the customer, if he desires it, before being placed in the hands of the engravers. Ordinary photographs, lithographs, or tints may be sent for reproduction in the same manner as those referred to above. In these cases, that do not admit of direct reproduction, almost any size will do, but the details should be carefully expressed.

**About Preserving Copy.**—In passing through the hands of the photographer, proof-taker and finisher, and sometimes of the compositor, copy is liable to become more or less soiled, and it is only by great pains that it can be kept perfectly neat and clean. When drawings of special value are sent, which are to be preserved, or prints from choice books that may not be removed, we should be particularly apprised of the fact, so that proper carefulness may be observed, and that we may fix our charges to suit the case.

**Regulating the Proportions of Engravings.**—Copy with the finer tints admits of little or no reduction, as the lines become so close and the flat tints so indistinct as to entirely destroy the effect they are intended to produce. But Wood-cuts, with clear and distinct lines, may in general be reduced to one-half their lineal dimensions, and this reduction usually imparts a softness and beauty to the sky tints, ground work and foliage which they lack in the original.

**Selections for Reproduction.**—Some fine prints may be enlarged, and sometimes without any loss; but in most cases minor defects, scarcely perceived in the original, become emphasized, and are made too apparent in the copy. Generally it is safer to select the coarser kinds of work, as the tendency is to obscure the blemishes and bring the coarsely drawn lines of an ordinary wood-cut to something of the fineness and delicacy of a steel engraving. Any print, however, may be sent us as copy, and when it will not admit or successful reproduction, it may be *re-drawn* to suit any size or style required. When copy is to be either reduced or enlarged, the relative proportions are preserved. Accordingly, if either of the dimensions, *length* or *breadth*, be given, the other will be unfailingly regulated by the Camera.

**Proofs** will be furnished, when requested, of drawings by our own artists, which will enable the customer to make necessary suggestions or corrections before the drawing is finally given to the engravers. When finished a proof is carefully taken, and this may serve as some criterion of the work to be expected from the pressman.

**Time.**—Although it is possible for us to turn out in a few hours a finished plate, yet from the great variety of work constantly on hand, we cannot usually guarantee to fill an order for a single plate in less time than from three to six days, with a reasonable increase for larger orders.

**Prices** depend upon various considerations, and the size is not always the controlling factor in the estimate. A small vignette may demand more skill and thought, and consume more time and labor, than another design ten times its size. The quality of the work and the character of the drawing have much to do in regulating the cost. It is therefore impossible to furnish any general scale of prices, as it would be subject to constant revision, and hence less satisfactory than a special estimate from copy; but to those sending work in regular quantities and of even character, we can generally give a scale rate per square inch for reproductions.

**Estimates** will be given promptly on application. To render these exact and satisfactory it is necessary to send a copy of the drawing, sketch, print or photograph, and full information as to the size and general style of the work required, particular care being necessary in all minor details.

**Electrotypes.**—We have a fully equipped Steam Electrotyping Department, and prices for Electrotypes will be gladly sent on application.

**Fine Relief Plate Printing.**—We have ample facilities for doing press-work in a superior manner, and at moderate prices. Our presses have been fitted up to give the most perfect distribution of the strongest inks, which enables us to print many plates that are so fine that they could not be satisfactorily printed in the ordinary way. Specimens may be seen at our office.

**Terms.**—We require on all orders a **deposit of one-half** the price of the work with the order, the **balance to be paid on delivery**. All plates will be sent by express unless otherwise ordered. If by mail will be at the customer's risk, and must be fully paid, including postage, before shipment. This rule is unalterable except when our customers are well known to us and of assured responsibility, or when satisfactory references can be given from persons in this city.

**Remittances** should be made either by Drafts on New York, by Post Office Money Orders payable to **The Moss Engraving Co.**, or by Registered Letters.

**Letter, Bill, and Newspaper Head-  
ings, Maps, Cards, Envelopes.**



***Furniture, Silverware, Hardware, &c.***

**FOR BOOKS, NEWSPAPERS AND CATALOGUES.**

**Send Green Stamp for 24-page Illustrated Circular.**



# ADVERTISEMENTS.

---

PLUMBERS', GAS FITTERS'

AND

MACHINISTS'

MATERIALS AND SUPPLIES.



# NATIONAL TUBE WORKS CO.

Manufacturers of

LAP-WELDED, WROUGHT IRON

**STEAM, GAS AND WATER PIPE,**

From  $\frac{1}{8}$  to 14 Inches Diameter.

**Lap-Welded Iron Boiler Tubes,**

From 1 Inch to 18 Inches Diameter.

**TUBING AND CASING,**

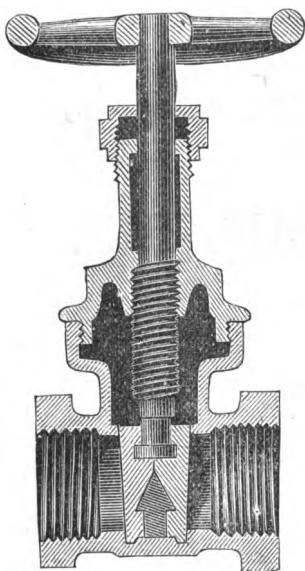
For Artesian, Oil, Salt and Gas Wells, with our Patent Protecting Couplings.

Improved Pipe Screwing Machines, and Mack's Patent Injector.

**WATER WORKS PIPE, GAS WORKS PIPE, MARINE BOILER  
TUBES, PUMP COLUMNS, GALVANIZED PIPE.**

**WORKS AT McKEESPORT, PA.**

OFFICES: { 8 Pemberton Square, Boston, Mass. 159 Lake Street, Chicago.  
104 John Street, New York. 113 Water Street, Pittsburgh, Pa.



MANUFACTURERS OF

**DOUBLE**

**Gate Valves,**

FOR

Steam, Water,

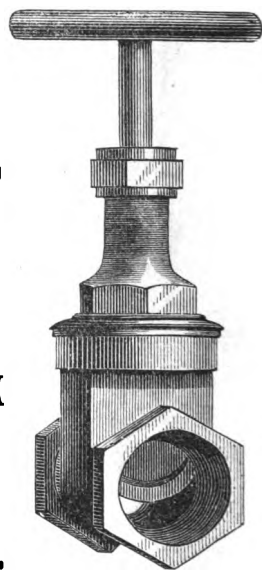
Gas, &c.

ALSO,

Globe, Angle and Check

**VALVES.**

**BRASS CASTINGS.**



**PEET VALVE COMPANY,**

163 Albany Street, - - Boston, Mass.



CHAS. H. BROWN.

R. PITT OWEN.

## BROWN & OWEN,

Manufacturers of and Dealers in

# WROUGHT IRON PIPE,

Plumbers', Gas & Steam Fitters' Materials of every Description,

N. W. Corner Twelfth and Noble Streets,  
PHILADELPHIA.

## CHAPMAN VALVE MANUFACTURING CO.,

MANUFACTURERS OF

STEAM,  
Gas & Water  
VALVES  
AND  
GATES.

—\*—

FIRE  
HYDRANTS

With or Without  
Independent  
Valves.

—\*—

All VALVES and  
HYDRANTS fur-  
nished with

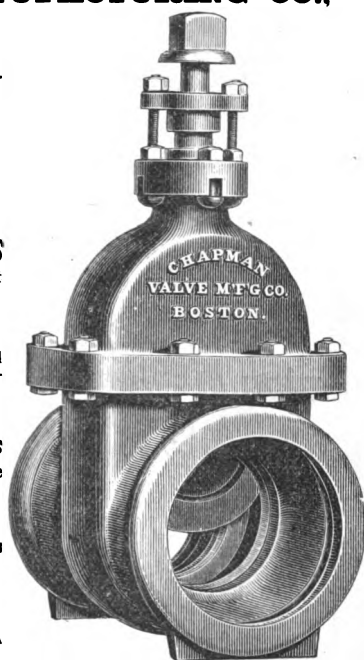
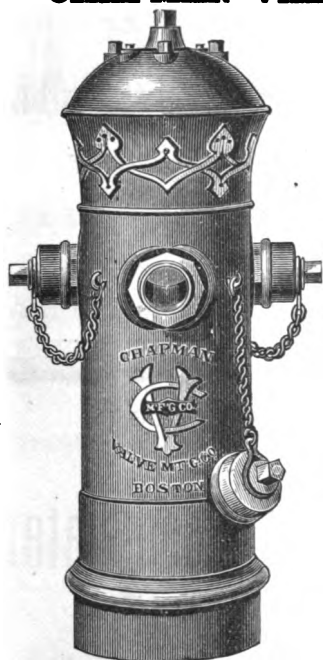
Babbitt  
Metal Seats  
And Non-corrosive  
Working Parts.

—\*—

Iron and Brass  
FOUNDERS.

—\*—

All work ~~60~~ 65  
Guaranteed.



General Office { Indian Orchard, Mass.  
and Works: {

Treasurer's { 77 Kilby St., Boston, Mass.  
Office: {

## FORD & KENDIG,

712 FILBERT ST. & 1428-32 CALLOWHILL ST.,  
PHILADELPHIA.

—MANUFACTURERS OF—

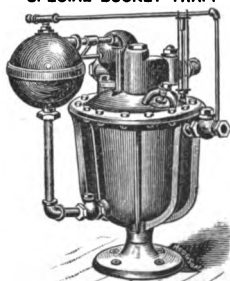
# WROUGHT IRON PIPE,

BRASS AND IRON VALVES, FITTINGS, &c.

# THE ALBANY STEAM TRAP COMPANY'S

→ Bucket and Gravitating Return Traps. ←

SPECIAL BUCKET TRAP.



*Automatically drains the water of condensation from*

## HEATING COILS,

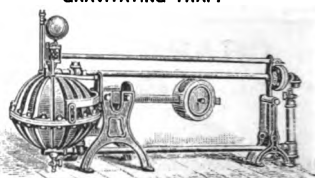
*and returns it to the boiler  
under pressure, whether  
coils are*

**ABOVE or BELOW**

*the water level in boiler,*

*doing away with pumps and other mechanical devices for such purposes.*

GRAVITATING TRAP.



**ALBANY STEAM TRAP CO.,**

**ALBANY, N. Y.**

**FREDERICK TOWNSEND, Pres.**

**JAMES H. BLESSING, Sec'y and Treas.**

**CAPT. C. HINSDALE.**

**E. W. HINSDALE.**

**CAPT. C. HINSDALE & SON,**

General Western Agent for the

## Berryman Patent Feed-Water HEATER AND PURIFIER,

— AND THE —

**DAVIS DOUBLE-ACTING**

**Economic Boiler & Tank Feed-Pump.**

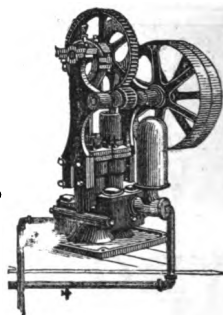
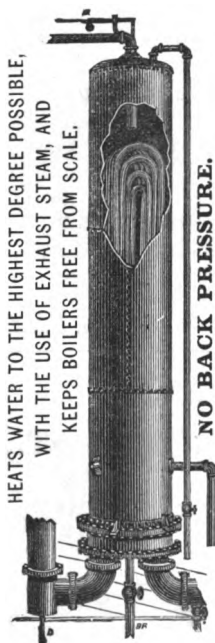
**OFFICE:**

**34 SOUTH CANAL STREET,**

**CHICAGO.**

Send for Circular.

**A FULL LINE OF THESE GOODS KEPT IN STOCK.**

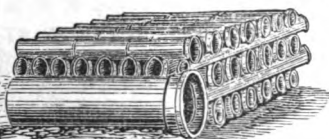


JOHN DAVIS & CO.,  
DEALERS IN  
**WROUGHT IRON PIPE AND FITTINGS,**  
BRASS GOODS OF EVERY DESCRIPTION.  
Worthington Steam Pumps, Steam Engines and Boilers, Rubber and Leather Belting,  
Steam Heating & Ventilating Apparatus. Send for Catalogue and Price List.  
69 TO 79 MICHIGAN STREET, . . . . . CHICAGO.

HAY & PRENTICE,  
**STEAM WARMING APPARATUS,**  
WROUGHT IRON PIPE AND FITTINGS,  
34 and 36 South Canal Street, Corner Washington Street,  
CHICAGO.

C. N. MARCELLUS & CO.  
MANUFACTURERS OF AND DEALERS IN  
*Malleable and Cast Iron Fittings for Gas, Steam & Water Pipe.*  
WROUGHT IRON PIPE CUT AND FITTED TO ORDER.  
**STEAM FITTERS' AND MACHINISTS' SUPPLIES.**  
69 VARICK STREET, NEAR CANAL, N. Y.  
SEND FOR PRICE LIST.

R. D. WOOD & CO.,  
PHILADELPHIA.  
**CAST IRON PIPE,**  
FOR WATER AND GAS.



Mathew's Fire Hydrants.  
EDDY VALVES.  
Jonval Turbines and Heavy Machinery.  
**FLANGE PIPE.**  
Lamp Posts and General Foundry Work.

**THE WELLINGTON PATENT OVERFLOW BASIN.**  
C. E. ROBINSON & CO.,  
31 East 10th St., New York.

# CHAS. HARRISON & CO.

MANUFACTURERS OF

## PLUMBERS' MATERIALS,

No. 16 West 4th Street, New York.

CHAS. HARRISON.

WM. P. TOWNE.

DE WITT IMPROVED CYLINDER GAS WORKS.  
Manufactured by THE EXCELSIOR GAS LIGHT & MF'G CO., Chicago, Ills.



### THE EXCELSIOR

Gas Light & Mf'g Co.,

122 to 128 MICHIGAN ST.,  
CHICAGO, ILLS.

MANUFACTURERS OF

ELLS' PATENT GAS BURNER

Street Lamps and Lanterns.

ALSO,

De Witt Improved

CYLINDER GAS WORKS.

By this improvement in Gas Machines, the best light from gas produced at from 60 to 75 cents per 1000 feet. Adapted to all climates. Absolute safety from risk, and use endorsed by leading Underwriters.

Send for descriptive pamphlet and price list.

Excelsior Gas Light & Mf'g Co.,  
122 to 124 MICHIGAN ST.,  
CHICAGO.

—A. CARR, —

Manufacturer of and Dealer in

Plumbers', Steam and Gas Fitters', and Machinists' Supplies,  
WROUGHT AND CAST IRON PIPE,

No. 62 John Street, New York.

### SPECIALTIES:

Carr's Positive Steam Pump,

Selden Steam Pumps.

Carr's Steam Radiators.

**GERMAN & ROBINSON,**  
12 North 4th Street,  
PHILADELPHIA.

**Brass Work and Fittings.**

AGENTS FOR  
**EAGLE PACKING.**

**EMERY WHEELS,**  
Rubber and Leather Belting,  
FOUNDRY SUPPLIES.

**JAMES BULGER, Jr.**  
25 Centre Street, New York.

MANUFACTURER OF

**LIFT & FORCE PUMPS.**

Manufacturer and Dealer in

**Plumbers' Supplies.**

POPULAR BECAUSE RELIABLE.

AUSTIN'S PATENT

**Expanding Conductor**

AND

**Patent Ribbed Pipe, with Adjustable Elbows.**

MANUFACTURED OF THE BEST MATERIAL, WITH SEAM DOUBLE LOCKED  
AND GROOVED, AND EXTRA SOLDERED BY THE PROCESS  
OF GALVANIZING AFTER FORMATION.

**AUSTIN, OBDYKE & CO.,**

SOLE MANUFACTURERS,

Office, 1705 Chestnut St., Philadelphia.

Works, West Fernwood, Pa.

AGENCIES ESTABLISHED IN ALL THE PRINCIPAL CITIES.



ESTABLISHED 1856.

**GEO. K. PAUL & CO.,**

Manufacturers of and Dealers in

**Wrought-Iron Pipe and Fittings,**

Plain, Galvanized and Enamelled, for Water, Steam and Gas.

**Brass, Cast-Iron FITTINGS, Malleable-Iron**  
OF ALL KINDS.

Swamscot Machine Co.'s

**RETURN-TUBE UPRIGHT BOILER,**

Patented April 1, 1879. Specially adapted for House Heating.

SWAMSCOT MACHINE CO.'S VERTICAL

**Wrought-Iron Tube and Open-Base Radiators.**

98 Milk and 2 Bath Streets,  
BOSTON, MASS.

**T. SHAW,**

**915 RIDGE AVENUE,**

PHILADELPHIA, PA., U. S. A.

Test Gauges,

Test Pumps,

Hydraulic Gauges,

Vacuum & Blast Gauges,

Pipe Line Gauges,

Wheel Press Gauges,

Gunpowder Gauges up to

50,000 lbs. per sq. inch,

Gas Testers for Mines,

Friction Buffers for R. R.

Mercury Gauges,

Hydraulic Accumulators,

Spark Arresters,

Oil Tanks Lightning Proof,

Air Chamber Feeders,

Hydraulic Discs, for Water

Bearings,

Air Cushion Pile Drivers,

Gunpowder Pile Drivers,

Noise Quieting Nozzles.

ESTABLISHED 1868.

CREQUE, RONALDS & CO.,  
54 Cliff Street, N. Y.,

MANUFACTURERS OF

**COPPER BOILERS,**

Showers, Foot and Seat Tubs, Closet Pans, Air  
Chambers, Pantry Sinks, Copper Balls.

Every Pattern, Size, Weight and Quality of

Copper, Zinc, and Nickel Plated

**BATH TUBS.**

*Galvanized Iron Range Boilers.*

FINE PLUMBING MATERIALS.

JAMES P. WOOD.

JOSEPH WOOD.

**JAMES P. WOOD & CO.,**  
**STEAM HEATING**

AND

Ventilating,

**Cooking Apparatus, &c.**

**39 SOUTH FOURTH ST.,**  
**PHILADELPHIA.**

**JOHN MANEELY,**  
**117 and 119 N. FOURTH STREET,**  
**PHILADELPHIA, PA.**

**Wrought Iron Pipe, Boiler Tubes,**

BRASS AND IRON VALVES AND COCKS,

**WROUGHT AND CAST IRON FITTINGS,**

—SOLE AGENT FOR—

**National Hardware and Malleable Iron Works' Fittings,**  
**GENERAL SUPPLIES, &c.**

**JAMES M. BEERS,**

Manufacturer of every kind and style of

**Carriage Wheel & Wood Working**  
**MACHINERY,**

**HUB, CENTERING & MORTICEING MACHINES,**

Spoke Tenoning, Re-Tenoning, Bevelling,  
Facing, Shaving and Belting Machines,

RIM BENDING, PLANING, BORING, ROUNDING,  
BELTING AND TREADING MACHINES,

Round and Oval Tenoning Machines, &c., &c.

**25 Whitney Ave.,**  
**NEW HAVEN, CONN.**

CROSBY

**Steam Gage & Valve Co.,**

—MANUFACTURERS OF—

**STEAM GAGES,**

Pop Safety Valves,

ENGINE REVOLUTION COUNTERS,

LUBRICATORS,

**ENGINE INDICATORS,**

And all Instruments for use on Steam  
Engines and Boilers.

**95 and 97 Oliver Street,**  
**BOSTON.**

Franklin Institute, 1874.

Centennial, 1876.

# THE PHILADELPHIA GALVANIZING CO.

No. 2130 Race Street.

WORKS ESTABLISHED 1860.

Galvanizing Iron in all varieties executed in the best manner and in the shortest possible time.

BAR, PIPE, HOOP and SHEET IRON, WIRE WORK, COAL-HODS, TEA-KETTLES, BATH BOILERS,

**Sinks, Cemetery Enclosures, Railings,**

SHIP WORK, SPIKES, NAILS, &c.

Galvanized Castings of superior quality and finish, for Freezers, Washing Machines, Wringers and other Small Machinery, furnished at short notice.



## WORCESTER BOILER WORKS,

WORCESTER, MASS.

MANUFACTURERS OF

# FIRST-CLASS BOILERS,

WM. ALLEN & SONS.

### VALUABLE WORKS for METAL WORKERS, STEAM USERS, &c.

**THE MECHANIC'S FRIEND.** A Collection of Receipts and Practical Suggestions, relating to Bronzing, Cements, Drawing, Glues, Lacquers, Locomotives, Metal-working, Modeling, Railways, Solders, Steam Engine, and Miscellaneous Tools, Instruments, Machines, and Processes connected with the Mechanical Arts. By WILLIAM E. AXON, M. E. S. L. 12mo. Cloth. 300 Illustrations. \$1.50.

**THE MECHANIC'S AND STUDENT'S GUIDE** in the designing and construction of General Machine Gearing, as Eccentrics, Screws, Toothed Wheels, etc., and the Drawing of Rectilinear and Curved Surfaces. Edited by FRANCIS H. JOYNSON. With 18 folded plates. 8vo. Cloth. \$2.00.

**STEAM BOILERS:** their Design, Construction, and Management. By WILLIAM H. SCHOCK, Engineer in Chief, U. S. N.; Chief Bureau of Steam Engineering, U. S. N. 450 pages text. Illustrated with 150 wood cuts, and 36 full-page plates (several double). Quarto. Illustrated. Half morocco. \$15.00.

**MECHANIC'S TOOL BOOK,** with Practical Rules and Suggestions, for the use of Machinists, Iron Workers, and others. By W. B. HARRISON. 44 Illustrations. 12mo. Cloth. \$1.50.

**THE PATTERNS MAKERS' ASSISTANT,** embracing Lathe Work, Branch Work, Core Work, Sweep Work, and Practical Gear Constructions, the Preparation and Use of Tools, together with a large collection of useful and valuable Tables. By JOSEPH ROWE, M. E. Illustrated with 250 Engravings. \$7.50.

**A TREATISE ON THE RICHARDS' STEAM ENGINE INDICATOR,**—with directions for its use. By CHARLES T. POWERS. Revised, with notes and large additions as developed by American Practice, with an Appendix containing useful formulae and rules for Engineers. By F. W. BACON, M. E. Illustrated. Third Edition. (Enlarged.) 12mo. Cloth. \$1.00.

The above will be sent free by mail on receipt of price. A descriptive Catalogue of our Publications sent free on application.

**D. VAN NOSTRAND,** { 23 Murray Street, { **NEW YORK CITY.**  
Publisher and Bookseller, { 27 Warren Street, {

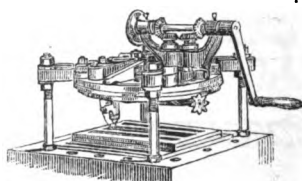
# L. B. FLANDERS MACHINE WORKS,

PEDRICK & AYER, Proprietors,

No. 1025 Hamilton Street, Philadelphia, Pa.

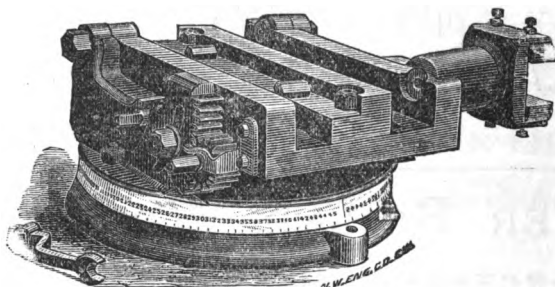
MANUFACTURERS OF

**SPECIAL TOOLS**  
FOR  
**Railway Repair**  
**SHOPS.**



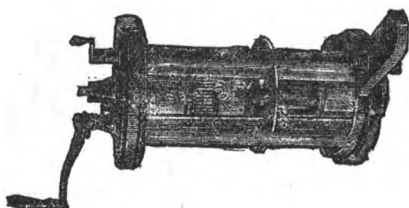
Patent Portable Valve Seat Rotary Planing Machine.

**FARLEY'S PATENT**  
**STEEL TUBE**  
AND  
**Flue Brushes.**

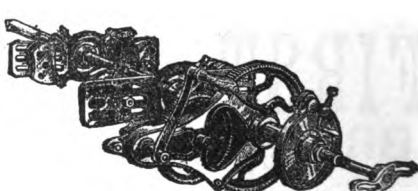


**GREENWOOD'S**  
**UNIVERSAL**  
**Planer Chuck.**

For Straight, Curved,  
or Angled Work.

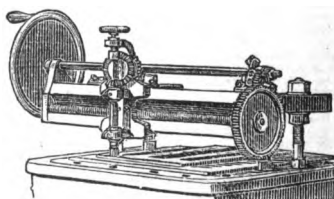


Patent Portable Crank  
Pin Machine.



Patent Portable Locomotive Cylinder  
Boring Machine.

**FLANDER'S**  
**RADIUS**  
**PLANER.**



Patent Steam Chest Seat Milling Machine.

**PATENT**  
**PORTABLE**  
**Drilling Machines.**



# HARRISON SAFETY BOILER WORKS.

S. E. Cor. 15th & Wood Streets, Philadelphia.

SHUMWAY, BURGESS & CO.

# BOLT MAKERS,

Cor. Michigan and  
Franklin Streets.

CHICAGO.



EDWARD CARTER,  
ANSONIA, CONN.

BRASS FOUNDER AND FINISHER.

Dealer in OLD METALS.

HEAVY CASTINGS A SPECIALTY.

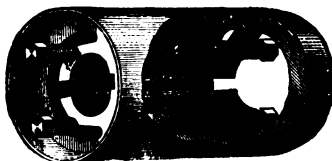
—THE—  
I. P. MORRIS CO.,  
Richmond and Norris Streets, - - - Philadelphia.

STEAM ENGINES, BOILERS  
GENERAL MACHINERY.

# PHILADELPHIA SHAFTING WORKS.

ESTABLISHED 1859.

Can be applied or removed  
in a few minutes.



Has a grip equal to a  
forcing fit.

Patent Internal Clamp Coupling for Shafting.

**GEO. V. CRESSON,**  
MANUFACTURER OF

→ **SHAFTING** ←

AND ALL ITS APPURTENANCES,

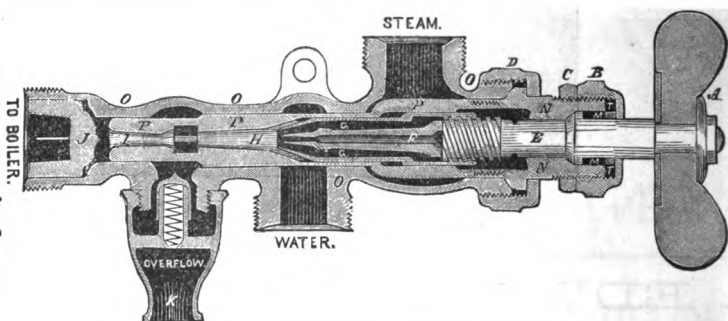
Eighteenth and Hamilton Streets, Philadelphia, Pa.

ECLIPSE PATENT INJECTOR,

Manufactured by the

**PENNSYLVANIA BRASS WORKS,**

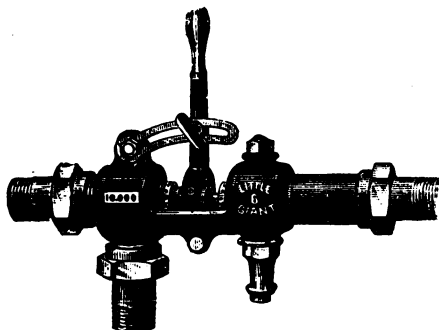
The only Injector made that can have all  
the working parts taken out without  
breaking any of the connections.  
TO BOILER.



Send for Circulars and give it a trial.  
Orders by mail promptly attended to.

1512 SPRING GARDEN ST., PHILADELPHIA, PA.

**GUARANTEED TO GIVE SATISFACTION.**



**RUE'S**  
**"LITTLE GIANT" INJECTOR.**

Guaranteed to be **RELIABLE** under all circum-  
stances where an Injector will work.

THE GREAT BOILER FEEDER FOR  
LOCOMOTIVE,  
MARINE, **BOILERS.**  
STATIONARY, and other

Also, Mfrs. and Patentees of the  
**"LITTLE GIANT"**

**BOILER TESTING APPARATUS.**

The only Boiler Testing Apparatus in the market, made by the Combination of an Injector and Ejector. In use  
by all leading E. E. and Locomotive Builders, and has never failed to give entire satisfaction.

Send for  
Circular.

**RUE MFG. CO., 904 Filbert St., Philadelphia.**

THE

**E. HORTON & SON CO.**

Windsor Locks, Conn., U. S. A.

Post Office Box 222.

—ONLY MANUFACTURERS OF THE—

**Horton Lathe Chuck.**

More durable, accurate, stronger and lighter than any chuck in market. The only chuck made using the

**PATENT JAW,**

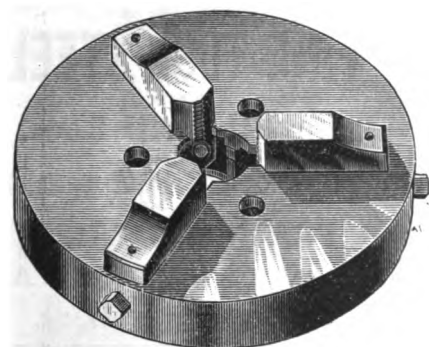
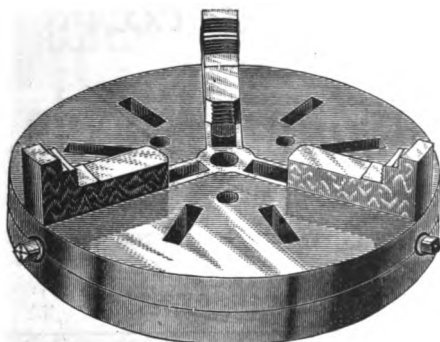
Which insures perfect accuracy.

**BEWARE OF IMITATIONS.**

None Genuine without our Trade Mark—

**"THE HORTON LATHE CHUCK."**

SEND FOR ILLUSTRATED CATALOGUE.



**ANDOVER IRON CO.,**

407 WALNUT ST., PHILADELPHIA.

**GREY FORGE AND GREY MOTTLED IRON,**

For BEST Mill Products.

**No. 2 FOUNDRY for MACHINE CASTINGS, &c.**

Requiring Special Strength.

**CHILL IRON FOR CAR WHEELS, &c.**

Each pig marked exact chill depth ( $\frac{1}{8}$  inch to  $\frac{3}{8}$  inch), A. WHITNEY & SON'S Standard Test.

**F. A. COMLY, Treas.**

**J. WESLEY PULLMAN, Agent.**

New Jersey Bessemer, Mill, and Foundry

**IRON ORES.**

BLUE, RED, HOFF & BROTHERTON.

Also NEW YORK ORES:

HEMATITE ORE, from Cornwall-on-Hudson. "LAKE" Bessemer Magnetic—Mahopac.

**J. WESLEY PULLMAN, 407 Walnut St., Phila.**

## CRYSTAL EMERY WHEEL CO.,

MANUFACTURERS OF PATENT SOLID

## Emery and Corundum Wheels,

NORTHAMPTON, MASS.

J. MULLIGAN, Pres't.

CHAS. E. STEVENS, Treas.

CHICAGO OFFICE: 61 SOUTH CANAL STREET.

THE WOODBRIDGE PATENT  
LATHE AND PLANER TOOL.

Right and Left Hand Cut.

## NO FORGING.

Four Cutters with each Tool, and every Tool **warranted**. Price, \$3.00, or \$3.25 post-paid. Extra Cutters furnished at 25 cts. each.

SEND FOR TOOLS, OR FOR CIRCULAR.

IMPORTERS OF

## FINE TOOL STEEL

AND

English Drill Rods.

FULL STOCK CONSTANTLY ON HAND.

PRATT & CANDEE,  
Hartford, Conn., U. S. A.

MACHINISTS' SUPPLIES.

## THOMAS GANNON,

Successor to the late JOHN BENSON. - ESTABLISHED 1829.

## COPPERSMITH, BRASS FOUNDER AND MACHINIST,

Manufacturer of GANNON &amp; DAUDT'S Improved Double and Tripple Effect Sugar Apparatus.

*SUGAR, ALCOHOL AND RUM APPARATUS A SPECIALTY.*EVERY DESCRIPTION OF COPPER WORK AND MACHINERY FOR RUM, ALCOHOL,  
GRAIN AND TURPENTINE DISTILLERIES.

## PLANTATIONS AND SUGAR REFINERIES FITTED UP COMPLETE.

WORKS, 66 TO 76 HUDSON ST., JERSEY CITY, N. J.

Take Cortlandt St. Ferry.

Two Blocks South of Penn. R. R. Depot.

C. E. KIMBALL,  
**ELEVATORS.**

All kinds, with Self-Closing Hatchways and Latest Improvements. We make the best Hand-power Elevator made.

## OVERHEAD RAILWAYS.

*The most complete Tramway found in the Country.*

HOISTS.—The Largest Line in New England.

MAGIC SCREW PLATES FOR THREADING PIPE AND BOLTS.

MACHINIST &amp; PIPING TOOLS, ETC.

ALL OF THE ABOVE SEEN AT

Send for Catalogue.

191 Fort Hill Square, Boston.

## NORTHWESTERN FILE WORKS,

H. S. HOLDEN, PROPRIETOR.

EXTRA QUALITY, FULL WEIGHT,

## Hand-Cut Files.

Make a Specialty of 12 and 14 inch flat.

Gives the largest discounts. Send for Price Lists before placing your orders.

65, 67 & 69 South Canal Street,  
CHICAGO.

We also re-cut files equal to new at HALF PRICE, and pay freight or express charges one way.

JOHN BECKER,  
28 Oliver Street, Boston, Mass.

Fine and Experimental Machine Work.

SPECIAL TOOLS FOR INVENTORS.

MODELS,

CUTTING DIES & PUNCHES,

AND GENERAL

MACHINE JOBBING.

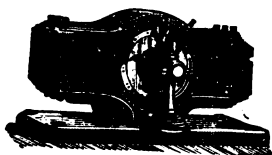
Pattern Name and Index Plates  
FOR LATHES AND MACHINE TOOLS,

Engraved in a VERY SUPERIOR MANNER. Finished Castings for Name Plates furnished at reasonable prices.

## VAN DEPOELE ELECTRIC LIGHT COMPANY,

MAKERS OF

## Electric Lighting Apparatus.



OFFICE AND WORKS:

Van Buren and Franklin Streets,  
CHICAGO, ILLS., U. S. A.

Catalogues and Price Lists, containing Testimonials and list of parties using this system, will be furnished on application.

This Company has fully established its record for construction of the most approved system of Electric Lighting Apparatus. Producing lights of the highest standard of purity, and requiring the smallest consumption of power compared with the result obtained; the system having been examined and tested by the most competent electrical judges in America and Europe with the most satisfactory conclusions. This Company are prepared to compete for the furnishing of Electric Plants of any capacity required.

THE

Osborne & Cheesman Co.,

ANSONIA, CONN.

Sheet Brass, German Silver,

BRASS, COPPER & GERMAN SILVER WIRE,

JACK CHAIN,

Plumbers' Articles,

TUBING, BRASS BUTTS, &c.

N. S. BOUTON, Pres.  
E. FOOTE, JR., V. Pres.  
E. T. CUSHING, Secy. & Treas. } Chicago Office.

UNION FOUNDRY

—AND—

Pullman Car Wheel Works,

General Office, Chicago. Works at Pullman, Ills.

MANUFACTURERS OF

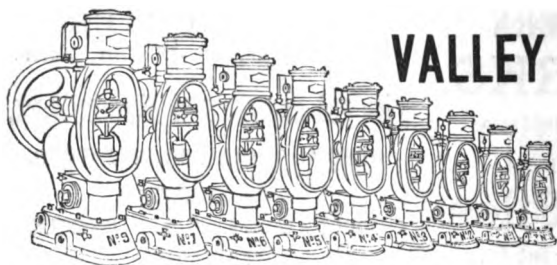
ARCHITECTURAL IRON WORK,

Castings and Machine Work for Grain  
Elevators and Packing Houses,

CYLINDERS, KETTLES, Etc.

CAR WHEELS AND CAR CASTINGS.

We make a Specialty of Car Castings and Similar Work.



## THE VALLEY MACHINE CO.

Easthampton, Mass.

Steam Pumps  
AND  
BOILER FEEDERS.

## HARTFORD STEAM BOILER INSPECTION AND INSURANCE CO.

Issues Policies of Insurance after a  
careful inspection of the Boilers  
COVERING ALL LOSS OR DAMAGE TO  
BOILERS, BUILDINGS AND MACHINERY,  
ARISING FROM  
**STEAM BOILER  
EXPLOSIONS.**



The Business of the Company in-  
cludes all kinds of Steam Boilers.  
Full information concerning the plan of  
the Company's operations can be obtained  
at the  
COMPANY'S OFFICE,  
**HARTFORD, CONN.,**  
or at any agency.

J. M. ALLEN, Pres.

W. B. FRANKLIN, Vice-Pres.

J. B. PIERCE, Sec.

### BOARD OF DIRECTORS.

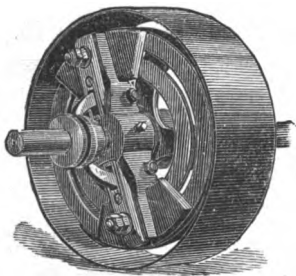
J. M. ALLEN, President.  
LUCIUS J. HENDEE, President Aetna Fire Ins. Co.  
FRANK W. CHENEY, of Cheney Bros. Silk Mfrs., Hartford  
and New York.  
CHARLES M. BEACH, of Beach & Company.  
DANIEL PHILLIPS, of Adams' Express Company.  
GEO. M. BARTHOLOMEW, President Holyoke Water Power  
Company.  
RICHARD W. H. FARVIS, President Colt's Pat. Fire Arms  
Manufacturing Co.  
THOMAS O. ENDERS, of the Aetna Life Insurance Co.

LEVERETT BRAINARD, of the Case, Lockwood & Brainard Co.  
GEN. W. B. FRANKLIN, Vice-President Colt's Pat. Fire  
Arms Mfg. Co.  
GEO. CROMPTON, Crompton Loom Works, Worcester, Mass.  
HON. THOMAS TALBOT, Ex-Governor of Massachusetts,  
Lowell.  
NEWTON CASE, of the Case, Lockwood & Brainard Co.  
NELSON HOLLISTER, of the State Bank, Hartford.  
CHAS. T. PARRY, of Baldwin Locomotive Works, Phila-  
delphia.  
HON. HENRY C. ROBINSON, Attorney-at-Law, Hartford.

## FRICITION HOISTING ENGINES AND ELEVATORS.

Also the CELEBRATED FRICTION CLUTCH  
PULLEY AND CUT-OFF COUPLING known as the

### CAPTAIN.



With this CLUTCH we are able to start the heaviest machinery,  
such as Callender Rolls of Rubber, Paper and Brass direct from  
line shaft, and can save 9-10 of the damage to Crank Pressers  
and any of this class of machinery. For Cut-off couplings we  
can many times save the expense of an extra engine; are using  
this Clutch for that purpose up to 400 H.P. with perfect success.

**D. FRISBIE & CO.,**

No. 481 North Fifth Street, Philadelphia, Pa.



# ADVERTISEMENTS.

---

IRON, STEEL AND OTHER METALS,  
MACHINERY AND TOOLS,  
MACHINISTS' & METAL-WORKERS' SUPPLIES.



# MORRIS, WHEELER & CO., IRON WAREHOUSE,

16th and Market Streets,

PHILADELPHIA.

---

BAR IRON, BOILER PLATE,

Angles, Beams, Channels, Tees, Etc.

Cut Nails, Cast Steel, Pig

Iron, Muck Bars,

Blooms, Etc.

Branch Offices:

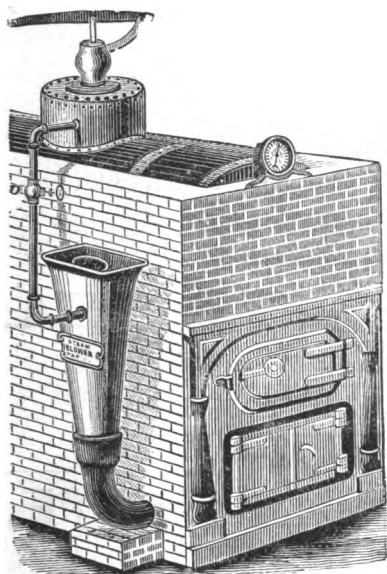
No. 400 Chestnut Street, Philadelphia,

AND

No. 14 CLIFF STREET, - NEW YORK.



# PARSONS' STEAM BLOWER.



**For Improving Bad Draft in Boilers, Burning Waste Materials of all kinds, Screenings, or Slack Coal.**

It requires no gearing, belting or machinery. It is a power within itself, capable of accomplishing a wonderful range of work.

## PARSONS' Air Jet Tube Cleaner.

**This Apparatus Cleans 10 Tubes per Minute, while the Boiler is running.**

Will not get out of order, and will last as long as the Boiler. They are guaranteed First-Class, and are sold on their merits only. Sent **for trial** to responsible parties.

MANUFACTURED BY

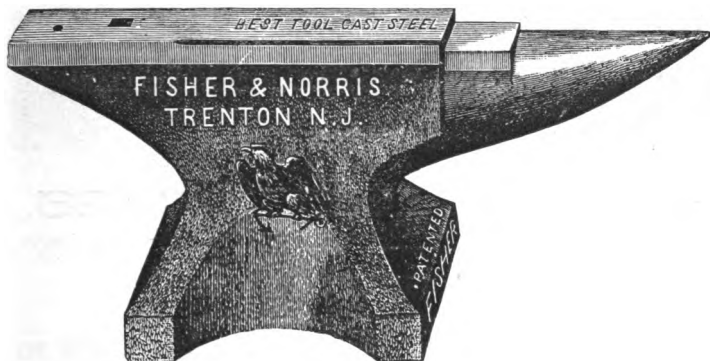
**Watertown Steam Blower Company,**

**H. E. PARSONS,**

**95 & 97 Liberty St., New York.**

# THE "EAGLE" ANVIL.

Established 1848.  
LATEST PATENT, APRIL 24, 1877.



Better than the Best English Anvil.  
WARRANTED!!

Face in one piece, of BEST TOOL CAST STEEL. PERFECTLY WELDED, perfectly true; of hardest temper, and never to come off or "settle." It does not bounce the hammer back, and therefore can do more work with lighter hammer. Horn of tough *untempered steel*, never to break or bend. *Only Anvil made in United States fully warranted as above. None genuine without our trade-mark.*

**ANVILS weighing 100 lbs. to 800 lbs., 10 Cents per lb.**

Where our EAGLE ANVILS are not kept for sale by the regular Dealers, we will allow a discount to any purchaser sending us the amount with his order, and will forward by lowest freight.

*N. B.*—That the "*Eagle*" Anvil is the *only* one made at Trenton, New Jersey, and it must not be mistaken for an Anvil in the market called Trenton, but which is really of foreign manufacture, and an imported imitation of the English Anvil.

**Sold by:** New York—Russell & Erwin Manufacturing Company, Durrie & McCarty, Tennis & Wilson. Philadelphia—James C. Hand & Co. Boston—George H. Gray & Danforth. Baltimore—W. H. Cole & Sons, John R. Kelso, Jr. Louisville—W. B. Belknap & Co. Cincinnati—Post & Co. Cleveland—The Lake Erie Iron Co.

THE  
 ↳HOTCHKISS AUTOMATIC MECHANICAL↳  
**BOILER CLEANER.**

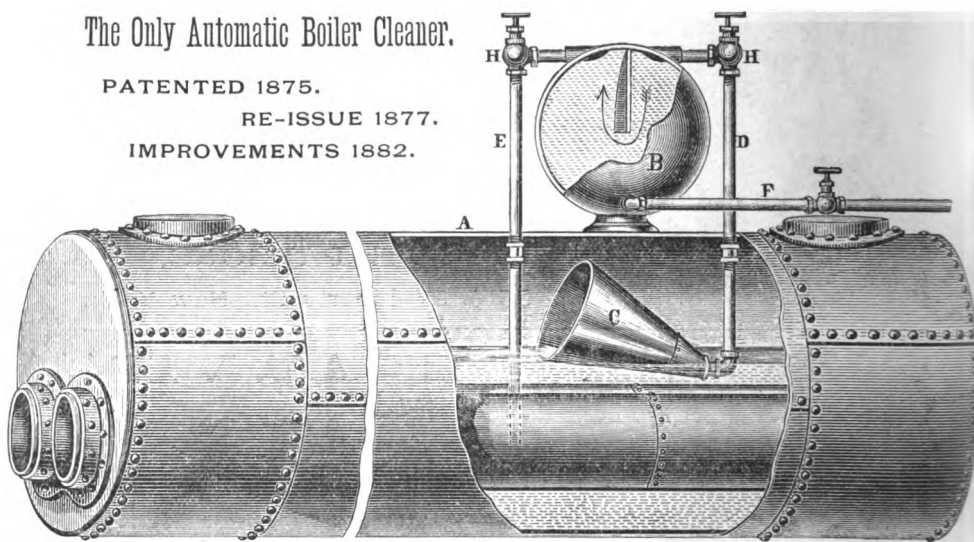
Removes all Deposits and Sediments from the Boiler, Entirely  
 Preventing Incrustation and Foaming.

The Only Automatic Boiler Cleaner.

PATENTED 1875.

RE-ISSUE 1877.

IMPROVEMENTS 1882.



**JAS. F. HOTCHKISS,**  
 84 John Street, - - - New York,  
 SOLE PROPRIETOR.

Send to above address for an illustrated book entitled, "HOW TO KEEP  
 BOILERS CLEAN," containing varied and valuable information for all

STEAM USERS, &c. ————— ↗ MAILED FREE.

**HENRY G. MORRIS,**  
 209 S. Third Street, Philadelphia, Pa.,  
 AGENT FOR WEST COAST OF SOUTH AMERICA.

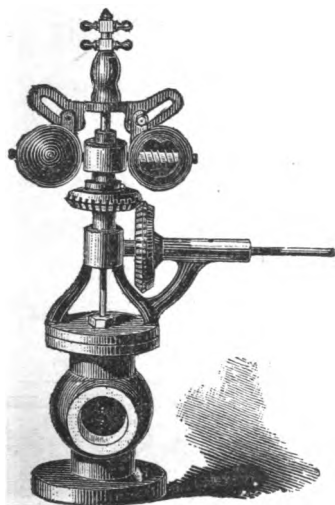
Sub-Agent in Lima, Peru, - - - **CARLOS L. CARTY.**

# Roberts' Engine Governor.

(SUTCLIFFE'S PATENT.)

WITH ADJUSTABLE VALVE.

The Most Sensitive Governor in Use.



These Governors are more simple, are made with less wearing parts than others, are *warranted to give perfect satisfaction, and are sent out on trial.*

TRY ONE.

MANUFACTURED BY

DWIGHT ROBERTS,

291 West Eleventh Street, - - New York.

CARMICHAEL & EMMENS,

130, 132 and 134 Cedar Street,  
NEW YORK CITY.

21, 23, 25 and 27 W. Lake St.,  
CHICAGO, ILL.

→\* IRON MERCHANTS \*←

DEALERS IN

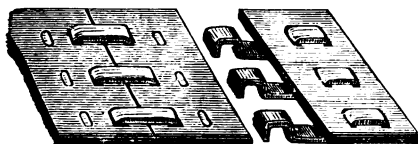
Iron and Steel Boiler Plate,

Lap Welded Boiler Tubes, &c.

Agents for Otis Celebrated Cast Steel Boiler Plates; Coatesville Iron Co.; the Laurel Rolling Mills, and Union Tube Works. Wrought Iron Beams, Angles, Tees, Rivets, &c.

21 to 27 West Lake Street, CHICAGO, ILL.

## LEADING MANUFACTURERS



Who have tested and are using these Hooks emphatically pronounce them in all respects the

**Best Belt Fastening in Use.**

The substantial double bearing of each Hook precludes the possibility of its

**"TEARING OUT."**

Address, **Champion Belt Hook Co.,**

110 LIBERTY STREET, NEW YORK.

**BERNARD DREYFUSS**  
 SUCCESSOR TO  
**DREYFUSS & SACHS**  
 PERFORATE  
**TIN AND METAL**  
 FOR THE TRADE  
 SAMPLES FURNISHED ON APPLICATION  
 75, 77, 79 & 81 DUANE ST. N.Y.

**CUTLER & BROWN,**  
 Shippers & Dealers in all Grades of  
**MOULDING SAND,**  
 Fire Sand, Fire Clay and Kaolin.  
 ALSO MANUFACTURERS & DEALERS IN  
**FOUNDRY FACINGS**  
**AND SUPPLIES.**  
 Shovels, Brushes, Riddles, Bellows,  
 Moulders' Tools.  
 Office, 46 Cliff Street,  
 NEW YORK.

**RICHARD DUDGEON,**  
 24 Columbia Street, - - - New York.

Maker and Patentee of

**IMPROVED**  
**Hydraulic Jacks,**

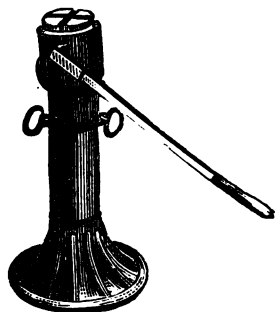
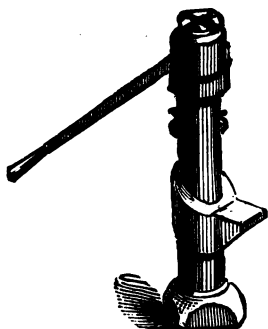
Punches,

ROLLER-TUBE EXPANDERS,

Direct Acting Steam Hammers.

Communications by letter will  
 receive prompt attention.

**Jacks for Pressing on Car Wheels or Crank Pins Made to Order.**



**PUTNAM MACHINE CO.**

115 Liberty Street, New York City.  
 WORKS AT FITCHBURG, MASS.

**MACHINISTS' TOOLS**

OF ALL KINDS.

**STEAM ENGINES,**

**SHAFTING,**

**Water Wheels and Mill Work.**

E. W. VANDERBILT.

E. M. HOPKINS.

**VANDERBILT & HOPKINS,**  
**RAILROAD TIES,**

*Car and Railroad Lumber.*

WHITE AND YELLOW PINE, OAK, GUM AND  
 CYPRESS SAWED TO ORDER.

No. 120 Liberty Street,  
 NEW YORK.

Also Creosoted Lumber, Timber,  
 Ties and Piles to Order.

**GENERAL RAILROAD SUPPLIES.**

# NEW YORK BELTING AND PACKING CO.

MANUFACTURERS OF

VULCANIZED RUBBER

# BELTING, PACKING, HOSE,

VALVES, TUBING, CAR SPRINGS, EMERY WHEELS, Etc.

— NO. 29 PARK ROW, —

JOHN H. CHEEVER, *Treasurer.*

NEW YORK.

# C. B. ROGERS & CO.

—MANUFACTURERS OF—

THE LATEST IMPROVED

# Wood-Working Machinery,

FOR CAR BUILDERS, PLANING MILLS, CABINET, CARRIAGE,

RAILROAD SHOPS, HOUSE BUILDERS, SASH, DOOR AND BLIND MAKERS.

**JAMES S. NASON.**

*Warerooms, 109 Liberty Street, New York.*



# J. B. & J. M. CORNELL,

141 Centre Street, N. Y.

# IRON

BUILDINGS, BRIDGES, ROOFS, FRONTS, GIRDERS,  
BEAMS, COLUMNS, STAIRS, &C.

Repairs receive prompt attention.

# USEFUL BOOKS!

Catalogue of works relating to the following trades, mailed free on application, and information about any book published on kindred subjects, supplied promptly:

Agricultural Implement Manufacturers.  
Bell Manufacturers.  
Boiler Makers.  
Bolt and Nut Manufacturers.  
Brass Foundries.  
Brass Goods Manufacturers.  
Britannia Ware "  
Bronzed Goods "  
Car Wheel "  
Chain "  
Cutlery "

Coppersmiths.  
Engine Builders.  
Fire Arm Manufacturers.  
Gas Fitters.  
Hardware Manufacturers.  
Iron Founders.  
Iron and Steel Dealers.  
Iron Railing Manufacturers.  
Lock "  
Machinery Dealers. "  
Machinists.  
Machinists' Supplies.

Millwrights.  
Plumbers.  
Plumbers' Supplies.  
R. R. Supplies.  
Rolling Mills.  
Safe Manufacturers.  
Screw "  
Steam Fitters.  
Steam and Gas Pipes.  
Sheet Iron Workers.  
Tool Manufacturers.  
Wood-Working Machinery.

Address, **E. & F. N. SPON, Publishers and Importers,**  
No. 44 Murray Street, New York.

# THE GOSHEN FOUNDRY & GAS MACHINERY CO.

FOUNDRY AND MACHINE SHOPS AT  
GOSHEN, ORANGE COUNTY, N. Y.

New York Office: 39 Dey Street.

Having enlarged their Works to meet the requirements of their customers,  
are now in a position to make from 10 TO 12 TONS OF CASTINGS  
DAILY, and are prepared to make contracts and to execute  
orders for Castings of every description at short notice

FOR

**RAILWAYS, ROLLING MILLS, BRIDGES, GRIST**

**MILLS, SAW MILLS, CIDER MILLS, &c.**

WE WILL FURNISH AT THE LOWEST CASH PRICES

**STEAM ENGINES OF ANY SIZE REQUIRED,**

**Shaftings, Pulleys, Hangers and Gearing.**

We shall keep a staff of EXPERIENCED WORKMEN, and are prepared  
to do Repairing to Machinery of all kinds. Also, Steam and  
Gas Fitting. We have constantly on hand a full supply  
of Gas and Steam Pipes and Fittings,  
of all sizes.

WE MANUFACTURE AND KEEP IN STOCK

**THE GOSHEN SUPERHEATING SAFETY BOILER**

in sizes from 18 to 100 horse power, (which Boiler will save 25 per cent. of fuel over  
any other Boiler in the market.) Also,

**THE GOSHEN HIGH PRESSURE ADJUSTABLE BLOWER,**

AND

**THE GOSHEN QUICK ACTION LOCK VALVE.**

**MR. JOHN MACKAY**, for 26 years Manager of the Orange County Furnace, will have  
the sole management of our Works, and will be glad to see his old customers and to receive a  
continuance of their patronage at his new stand.

WE HAVE IN CONNECTION WITH OUR WORKS AN

**ENGINEERING DEPARTMENT.**

We keep experienced Pattern Makers, and are prepared to furnish Plans, Specifications, Estimates and Patterns for the construction of Factories, Mills, Gas Works, Water Works, and for Machinery of every description.

We shall at all times be glad to receive a visit from any one, and to show them over  
our establishment, whether they desire to purchase or not.

**B. VAN STEENBERGH, PRESIDENT.**

**John Ashcroft M<sup>f</sup>g Co.**  
**40 JOHN ST.,**  
**NEW YORK.**

**PATENT WROUGHT IRON**  
**GRATE BARS**  
 —AND—  
**STEAM GAUGES.**

**HOUGHTON & Co.,**  
**15 HUDSON ST.,**  
 COR. READE,  
**NEW YORK.**

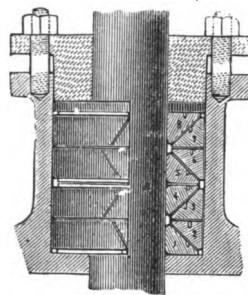
**BOILER & TUBE COMPOUND.**

A purely vegetable preparation, warranted to  
 loosen scale and prevent its formation.

**GREENE, TWEED & CO.**  
**118 CHAMBERS ST.,**  
**NEW YORK.**

**BAXTER WRENCHES.**  
**BLAKE'S PATENT BELT STUDS.**  
**WALRUS LEATHER.**  
**RUBBER GOODS.**

**KATZENSTEIN'S**  
**Self-Acting Metal Packing,**  
 For PISTON RODS, VALVE STEMS, &c.,  
 Of every description.



For Steam Engines,  
 Locomotives,  
 Pumps, &c., &c.

Adopted and in  
 use by the principal  
 Iron Works &  
 Steamship Companies,  
 within the  
 last eight years, in  
 this and foreign  
 countries. For  
 full particulars  
 and references,  
 address

**L. KATZENSTEIN & CO.,**  
**169 Christopher St., near West St., N. Y.**

**THE**  
**BABCOCK & WILCOX CO.,**  
**30 Cortlandt Street,**  
**NEW YORK.**

**WATER-TUBE**  
**Steam Boilers.**

**H. A. ROGERS,**  
**19 John Street, N. Y.**

**RAILROAD, MILL**  
**AND**  
**MACHINISTS' SUPPLIES.**

**W. J. FAUL,**  
71 GOLD STREET,  
NEW YORK.

**LUBRICANTS.**

Manufacturer of

**Positive Lubricators**  
—AND—  
**LUBRICATING COMPOUNDS.**

**WHITE & CROWELL,**

SUCCESSORS TO

**T. H. WHITE & HAYES,**  
Steamship, Engineers'  
AND  
RAILWAY SUPPLIES,  
235 West Street, cor. Beach, N. Y.

**India Rubber Goods,**  
*Hose Belting, Packing, Etc.*

**ASBESTOS FELTING WORKS.**

ESTABLISHED 1868.

J. E. HINTZE, TREAS.

**MILL, MINE AND STEAMBOAT SUPPLIES.**

Office—108 LIBERTY ST., near CHURCH ST., (Basement),  
**NEW YORK.**

**NON-CONDUCTING FIRE-PROOF CEMENT COVERING,**  
HAIR FELT CLINCHED ON CANVAS, READY FOR USE,  
For Boiler, Steam and Hot Blast Pipes, &c.

**ALL DESCRIPTIONS OF GENUINE ASBESTOS MATERIALS.**

Fire-Proof Lining, Flat, Rope and Wick Packing. Also, Crushed and Ground. Also,  
**THE USUDURIAN PACKING** in Sheets, or Gaskets cut to order. Roofing  
Materials and Metallic Paint, prepared for applying.

SEND FOR CIRCULARS OR ESTIMATES.

**DANIEL F. COONEY,**

88 Washington Street, N. Y.

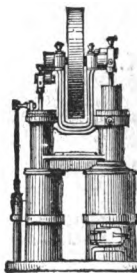
**Boiler Plates and Sheet Iron,**

LAP-WELDED BOILER FLUES,

**Boiler Rivets, Angle and T Iron,**  
**Cut Nails and Spikes.**

Agency for Glasgow Iron Co.; Bailey & Shoe-maker; Pine Iron Works; Lebanon Rolling Mills; Chester Pipe and Tube Co.; Albany & Rens. Iron & Steel Co.'s celebrated Boiler Rivets; Homogeneous Steel, Boiler and Fire Box Plates.

THE  
**Rider Compression Pumping Engine,**  
(Hot Air),



For city or country residences, where it is required to raise a supply of water, is the most **Perfect Pumping Machine** in the market. Its marvellous **Simplicity**, absolute **Safety**, great **Economy** and **Effectiveness**, render it far superior to all others. Can be run by any inexperienced person. Send for catalogue and price list to

**CAMMEYER & SAYER,**  
93 Liberty St., New York,  
and 20 W. Lake St., Chicago, Ills.



# NATHAN & DREYFUS,

94 Liberty St., N. Y.

PATENT

Self-Oilers and Lubricators.

EJECTORS

For conveying Water or Liquids

INJECTORS.

# HEIM

## LEATHER BELTING CO.

33 Ferry Street, N. Y.

MANUFACTURERS OF

## LEATHER BELTING.

# JAMES BLEWITT,

332 SEVENTH AVENUE, NEW YORK.

Engineers' Supplies, Novelty Belt Hooks, Cylinder and Machine Oils.

Blewitt's Special Cylinder Oil. Blewitt's Boiler Compound.

# MOTLEY & STERLING,

86 JOHN STREET, NEW YORK.

**MACHINISTS' TOOLS, FACTORY SUPPLIES, BOLTS AND NUTS.**

# THE KNAPP MFG. CO.,

22 and 24 Frankfort St., New York.



Specialties in Plumbers' and Engineers' Supplies.

Steam and Hydraulic Gauges. Gas Fitters' Patent Test Gauges. Gas Fitters' Mercury Test Gauges. Proving and Clearing Pumps. Plumbers' Alcohol Torches, Copper Balls, Soil Cups and Water Closet Cups. Patent Coupling Ale Cocks. Locomotive Spring Oilers. Locomotive Torches and Cab Lamps. Engineers' Oilier Sets, Oil Fillers, Tallow Cans, Hand Lamps and Cotton Waste Baskets.

The Jobbing Trade Solicited. Send for Catalogue.

ESTABLISHED 1850.

# SCHÄFFER & BUDENBERG,

ENGINEERS AND MANUFACTURERS OF

## Pressure and Vacuum Ganges

OF EVERY DESCRIPTION.

### EXHAUST STEAM INJECTORS,

Engine Counters, Thermometers, Pyrometers, Patent Reducing and Regulating Valves, Spark Extinguishers, Dynamometers, and Engine and Boiler Fittings in General.

Works at BUCKAU-MAGDEBURG, GERMANY.

Depot General of the United States,

40 JOHN STREET, NEW YORK.

## PHOSPHOR-BRONZE! PHOSPHOR-TIN!

Phosphor-Bronze is daily gaining favor with manufacturers who have to use a metal of great toughness and durability, of fine grain, high tensile strength and ductility, and is acknowledged far superior to any other alloy on account of the readiness with which it takes a polish, its elasticity, fluidity and beauty of color. Its high price, however, has so far prevented the use of it to so large an extent as its merit would warrant. For the first time an article is offered herewith, which makes it easy for everybody to manufacture his own Phosphor-Bronze of the grade it is wanted *by the simple process of melting*. This article is **PHOSPHOR-TIN**. By melting a very small quantity of it with copper, an excellent Phosphor-Bronze is obtained at a much cheaper price than the ready made Phosphor-Bronze can be had in the market. A trial ought to be made by everybody who is using it.

**A. KAUFMANN, 36 Park Place, New York.**

Sole Agent for the United States and Canada. For pamphlets please address the above, P. O. Box 2116, New York.

### STEAM PIPE AND BOILER COVERINGS.



### THE PATENT AIR-SPACE COVERING.

For Steam and Hot-Blast Pipes.

### THE PATENT REMOVABLE COVERING.

For Steam and Water Pipes.



### THE NATIONAL STEEL TUBE CLEANER.

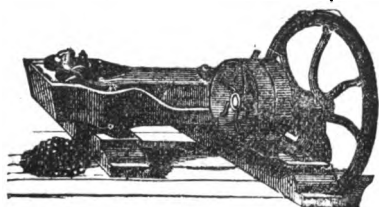
For Cleaning Boiler Tubes.

ASBESTOS MATERIALS. Mill Board, Packing and Fibre.

Send for  
Circular.

**THE CHALMERS-SPENCE CO., 23 John Street, N. Y.**

**W. S. MIDDLETON, 52 JOHN STREET, NEW YORK.**



FOSTER CRUSHER AND PULVERIZER.

Agent for Foster Crusher. Also, various other Pulverizers and Improved Machinery for Mining. Correspondence solicited.

### ✻ BROKER ✻

And Dealer in

### IRON AND STEEL

OF ALL KINDS,

HARDWARE & TOOLS,

MINING MACHINERY,

RAILROAD SUPPLIES.

**LEONARD & McCoy,**

118 Liberty Street,

NEW YORK.

Manufacturers' Supplies.

**MACHINERY AND ENGINES.**

**S. C. FORSAITH & CO.**

Manchester, N. H.

AND

209 Centre Street, N. Y.

**ENGINES & BOILERS,**

**MACHINISTS' TOOLS,**

**WOOD-WORKING MACHINERY.**

**T. NEW,**

MANUFACTURER OF

**Felt, Cement & Gravel Roofing.**

**NEW'S PATENT** { Brick, Slate, and Tile Paved Roofing,  
Water-Tight Flooring and Pavements,  
Water-Tight Cellars and Vaults,  
Fire and Water-Proof Combination Roofs,  
Fire and Water-Proof Ceilings,  
Improved Two and Three-Ply Prepared Roofing,  
Native Asphalt Roofing Materials.

**CELLARS MADE DRY BELOW TIDE WATER.**

**32 John Street, New York.**

**THOS. N. CUTHBERT,**

**20 Cortlandt Street,**

**NEW YORK.**

**BOILER COVERINGS.**

**HAIR FELTING.**

**H. Prentiss and Company,**

MANUFACTURERS' AGENTS & DEALERS IN

**MACHINERY, TOOLS and SUPPLIES,**

**No. 42 DEY STREET,**

**P. O. Box 3362,**

**NEW YORK.**

**JOHN SIMMONS,**

Manufacturer and Dealer in

**Wrought Iron Pipe and Fittings,**

FOR STEAM, WATER, GAS AND OIL,

BRASS AND IRON VALVES AND COCKS,

**FITTERS' & ENGINEERS' TOOLS & SUPPLIES**

OF EVERY DESCRIPTION.

**106, 108 & 110 CENTRE STREET,**

Cor. Franklin Street,

**NEW YORK.**

**PIPE AND CAST IRON RADIATORS.**

Pipe Cut and Bent to Order, from  $\frac{1}{8}$  to 12 Inch.

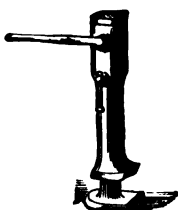
**McNAB & BELDEN,**

**96 John Street, N. Y.**

**BOILER COVERINGS.**

**HAIR FELTING.**

**Asbestos Material.**



**HYDRAULIC JACKS,**  
**IRON PULLEY BLOCKS,**  
*Weston's Ratchet Drills, Duplex Screw Punch,*  
**SCREW RAIL BENDERS,**  
**TELESCOPE SCREW JACKS,**  
**TRACK LIFTERS AND DRILLS,**



MADE BY

**MCCOY & SANDERS,**

43 Chambers Street, New York.

**JERSEY CITY STEEL WORKS.****JAMES R. THOMPSON & CO.**

Warehouse, 93 John Street, New York.

WE CARRY A WELL ASSORTED STOCK OF

Best Cast, File, Machinery, Toe Caulk, Tire and Spring Steel, Crow Bars, &c.  
**STEEL FORGINGS A SPECIALTY.**

Forgings Finished Rough Turned when required.

THOS. C. BURROWS, AGENT.

**PHILIP S. JUSTICE & CO.**

14 North Fifth Street, Philadelphia, Pa.,

Manufacturers and Patentees of

**DEAD STROKE POWER HAMMERS,**  
 (15 to 500 lb. Rams.)

**"RELIANCE" HYDRAULIC JACKS.**

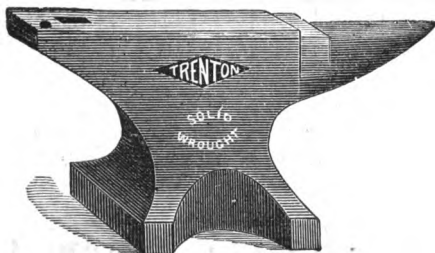
IMPORTERS OF

**SOLID DRAWN STEEL TUBES,**

Without a Weld, Smooth Inside and Out.

**HERMANN BOKER & CO.**

Manufacturers and Importers of

**Hardware, Cutlery and Guns,**101, 103 Duane St., and 91, 93 Thomas St.,  
**NEW YORK.**Trenton Vise and Tool Works,  
**TRENTON, N. J.**Manhattan Cutlery Co.,  
**SHEFFIELD, ENG.**

Sole Agents for R. Heinisch's Sons Celebrated Tailors' Shears, Trimmers, &amp;c.

# PACIFIC IRON WORKS.

P. H. SKIDMORE & SONS,

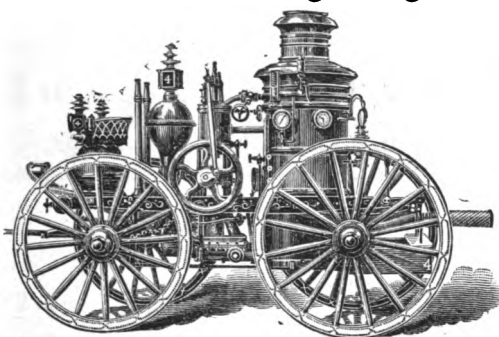
MANUFACTURERS OF

**Steam Engines, Boilers, Shafting, Hangers, Pulleys, &c.**

ELEVATORS

AND

Jeffers' Steam Fire Engines.



Improved Greene Automatic  
Cut-Off Steam Engines.

ALSO, BUILDERS OF

BRIDGEPORT, CONN.

**ASBESTOS MATERIALS.**

H. W. JOHNS MANUFACTURING CO.,

87 MAIDEN LANE, NEW YORK.

LIQUID PAINTS, ROOFING, STEAM PACKING, BOILER COVERINGS, &c.

**JOHN D. MOORE,**

38 Dey Street,

NEW YORK.

**SALAMANDER**

**GRATE BAR CO.**

110 Liberty Street, N. Y.

**Boiler Disincrustant.**

**➤ Grate Bars ➤**

JOHN A. ROEBLING'S SON'S CO.  
MANUFACTURER OF  
IRON,  
STEEL AND  
COPPER  
**WIRE ROPE**

OF EVERY DESCRIPTION.

ALSO,

Bright Annealed, Coppered, Galvanized and Tinned IRON and STEEL

➤ WIRE. ⚡

---

GALVANIZED TELEGRAPH and TELEPHONE WIRE of  
HIGH conductivity A SPECIALTY.

---

*Agents of THE NEW JERSEY WIRE CLOTH CO.,*

*and BUCKTHORN BARBED FENCING.*

NEW YORK OFFICE AND WAREHOUSE:

117 and 119 LIBERTY STREET.

Works: TRENTON, N. J.

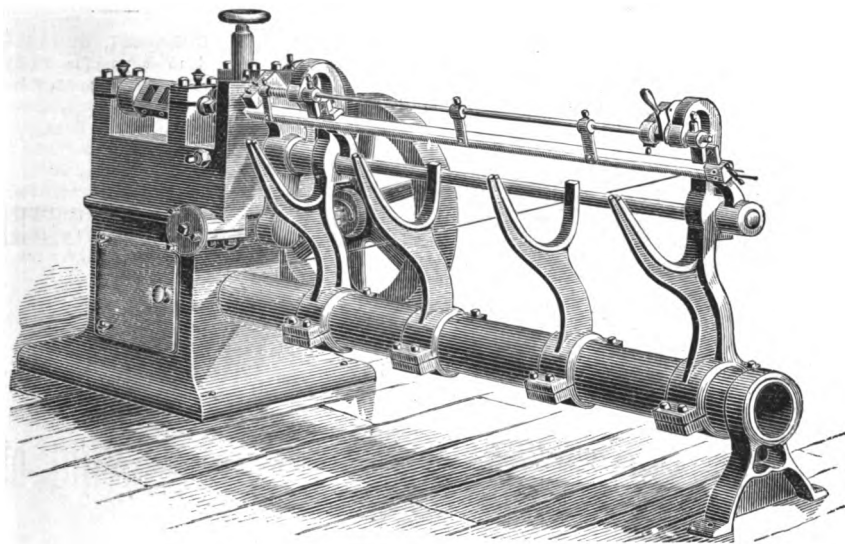
✉ SEND FOR PRICE LISTS.

**JOHN ADT,**

BUILDER OF

**Hardware Manufacturers'**  
**➤⌘MACHINERY,⌘➤**

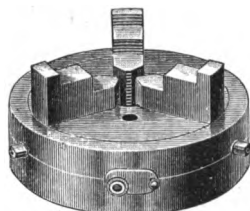
Office, 22 Artisan Street, - - New Haven, Conn., U. S. A.

**AUTOMATIC MACHINES**

to straighten and cut Wire of all sizes to any length; to cut Bar Iron or Straightened Wire in Short Lengths for Bolt and Rivet Blanks, Hinge Pins, &c.; to cut and mill Wire for Butt Pins, Bolt Shanks and similar articles, producing these as well as Pinions and other Wires for Clock Work, Lamp Burner Ratchet Wires and many articles of Piano, Builders' and other Hardware, complete at one operation; to make all kinds of ordinary and Barbed Staples; to drill Butts and other Hardware; to mill Butts; and for other special purposes to order. I also have a great variety of Foot Presses, and Buffing and Grinding Machinery.

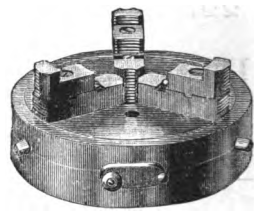
**SEND FOR CATALOGUE.**

# "THE NATIONAL CHUCK."



Combination Chuck,  
Common Jaw.

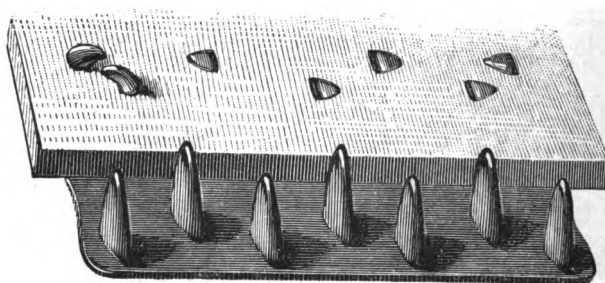
The National Mfg. Co.,  
MANUFACTURERS OF  
Combination, Universal,  
AND  
INDEPENDENT  
→LATHE CHUCKS,←



Combination Chuck,  
Reversible Jaw.

20 & 24 Artisan St. - New Haven, Conn.

## POTTER'S PATENT BELT HOOKS.



**CHEAPEST, DURABLE**  
and most popular **BELT**  
**FASTENER** now used for  
Single and Double Leather,  
all-ply Rubber, Leviathan  
Cotton Belts, Gandy, Raw-  
hide and all other kinds of  
Belting. Our "**EXTRA**  
**WIDE HOOKS**" for "**OLD**  
**RUBBER BELTS**" will save  
cost of a new belt for some  
time.

**NOVELTY BELT HOOK CO., Manufacturers.**

## THE HUNTINGTON EMERY WHEEL DRESSER. (Improved.)

Manufactured by THE CHICAGO SCREW CO., Chicago, Ill.



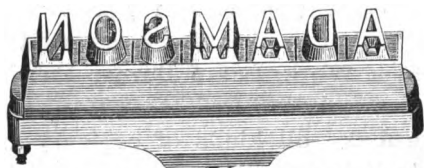
PAT. OCT. 11 1875

For Truing, Shaping, Sharpening,  
Emery Wheels Running

and Removing Glaze from Solid  
at Full Speed.

Address, **NOVELTY BELT HOOK CO.,**  
219 and 221 STATE STREET, - - - HARTFORD, CONN.

Patented October, 1882.



**THE ADAMSON**  
WITH MOVEABLE



**BRANDING IRON,**  
COPPER TYPE.

MANUFACTURER OF  
**PATTERN LETTERS.**  
**NAME PLATES,**  
FOR ALL KINDS OF MACHINERY,  
Made to any Pattern or Design.

Small Brass or White-Metal  
**PATTERNS,**  
FOR THE MECHANIC ARTS IN GENERAL.

ANY NAME OR NUMBER can be furnished in 1-4 inch, 3-8 inch or 1-2 inch in sizes. They are compactly and MECHANICALLY constructed, and can be taken apart or put together in a minute's time. SPECIAL Copper and Brass Type suited to the MECHANIC ARTS, manufactured and made to order.

**S. E. ADAMSON, Patentee and Manufacturer,**  
9 Murray Street, New York.



**TOWN & BROTHER,**  
225 CHESTNUT STREET, PHILADELPHIA.  
**RUBBER GOODS, LEATHER BELTING**  
AND  
**MANUFACTURERS' SUPPLIES.**

**H. ANDRES,**  
24 North Fourth Street, Philadelphia.  
**Portable Forges, Emery Wheels and Emery Polishers.**  
**MANUFACTURERS' SUPPLIES.**

AMERICAN  
PHOTO-LITHOGRAPHIC CO.

206 & 208 Broadway,  
NEW YORK.

**T. B. BICKERTON & CO.,**  
12 SOUTH FOURTH ST., PHILADELPHIA.  
**ASBESTOS MATERIAL,**  
Belting, Cotton Waste, Steam Packing; Railroad and Machinists' Supplies.

**STEEL  
CASTINGS**

**FROM 1-4 to 15,000 LBS. WEIGHT.**  
True to pattern, sound and solid, of unequalled strength, toughness and durability. An invaluable substitute for forgings or cast iron requiring three-fold strength.  
Gearing of all kinds, Shoes, Dies, Hammerheads, Cross-heads, Rockers, and Piston Heads for Locomotives, etc. 15,000 Crank Shafts and 10,000 Gear Wheels of this steel now running prove its superiority over other Steel Castings.  
**Crank Shafts, Crossheads, and Gearing Specialties.**  
Castings of every description. Send for Circulars and Prices.  
Address **CHESTER STEEL CASTINGS CO.,**  
Works, CHESTER, PA. 407 Library St., PHILADELPHIA.

# CHARLES HUBBARD,

46 CLIFF STREET, N. Y.

**Iron and Steel Forgings, Steel Castings,**

"NASHUA" BRAND

**HOMOGENEOUS STEEL BOILER PLATES.**

HEAVY STEEL FORGINGS, ten tons weight from a single ingot. "MUSHET'S" Special Tool Steel for Lathes and Planers, requires neither hardening nor tempering.

**BEST YORKSHIRE BAR IRON,** "TAYLOR" BRAND  
RECOMMENDED FOR  
STRENGTH,  
SOUNDNESS and  
UNIFORMITY.

"Superior" Hexagon Wrought Iron Bars. "Sheridan," "Leesport," "Temple" and "Mt. Laurel" Anthracite Pig Iron. Strongest Brands Charcoal Pig Iron.

Leading Brands Scotch Pig Iron, Special Importations.

Quotations on  
Application.

## HYDRAULIC JACKS & PRESSES.

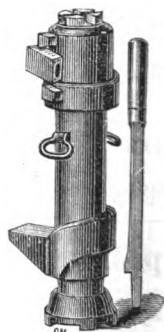
Hydraulic and Screw Punches.

→\* HYDRAULIC GAUGES.\*←

## PATENT HAND POWER PUNCHES

FOR

Iron Railing, Bridge and Building Contractors.



## PATENT SHEARS

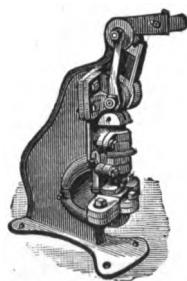
For Round, Flat Bar and Plate Iron.

POLISHING + AND + BUFFING + MACHINERY.

Leather Covered Wood Polishing Wheels, &c., &c.

**E. LYON & CO.,**

470 Grand Street, New York.



# ALMOND DRILL CHUCK,

Made of Steel throughout, equal to doing any work required of it. Runs perfectly true.

FOR SALE BY

All Machinists' Supply Stores.

**T. R. ALMOND,**  
84 PEARL STREET,  
BROOKLYN, N. Y.

**WILLIAMSON & CASSEDY,**  
24 South 4th Street,  
PHILADELPHIA.

**Railroad, Machinists' and  
Steamship Supplies.**

BELTING, WASTE, STEAM PACKING,  
LANTERNS  
—AND—  
RUBBER GOODS.



## METAL WORKS

Manufactures a full line of STANDARD BABBITT METALS of a refined and superior quality.

Our GENUINE BABBITT METAL stands Pre-eminent.

Satisfaction in all grades absolutely guaranteed.

TINNERS' and PLUMBERS' SOLDER a Specialty. Electrotypes and Stereotype Metals, &c. Pattern Makers' Metal. Brass Casting, &c., &c., &c. ANTI-FRICTION FOR RAILROAD BOXES.

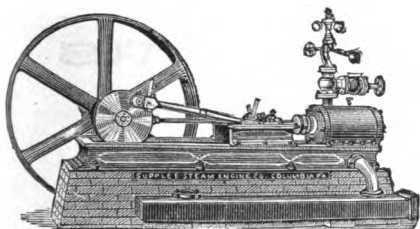
Correspondence  
Solicited.

J. J. RYAN & CO., 59 So. Canal St., Chicago, Ill.

## Supplee Steam Engine Co.

—MANUFACTURERS OF—

ENGINES, BOILERS, &c.



Parties in want of Engines and Boilers promptly attended. Send for Descriptive Circular.

**T. R. SUPPLEE,**

General Sales Agent,

Salesroom, 149 N. Third St., Phila.

## NAUGATUCK MACHINE CO.,

UNION CITY, CONN.

## Foundry & Machine Shop.

MANUFACTURERS OF

BAIRD'S PATENT ELEVATOR,

Taylor's Patent Speed Indicator,

DUCHARME'S PATENT AXLE STRAIGHTENER.

SEND FOR CIRCULAR.

**WE CHALLENGE THE WORLD FOR ITS EQUAL.**

*The Cheapest, most Durable and Effective Tool ever made for Cleaning Tubes, Hot or Cold.*



**RUFFNER & DUNN.**  
SCHUYLKILL FALLS, - - - PHILADELPHIA, PA.  
Patentees and Sole Manufacturers of the  
**EXCELSIOR STEEL TUBE CLEANERS.**  
*Most liberal discounts to dealers. Send for Circulars.*

## **SPRINGFIELD GLUE AND EMERY WHEEL CO.,** **SPRINGFIELD, MASS.**



It is as firm when wide open as when partially opened.  
The movement is obtained by a thumb-screw acting upon a cross-bar, which slides backward and forward over the caliper legs.  
The movement of the screw is about one to four of the caliper, thus the action of the caliper is both rapid and positive. Pat. Dec. 20, '81.

**HYDE, AYER & CO.**  
Springfield, Mass.

**Ruby, Emery & Corundum Wheels.**

**Ruby, Emery, Corundum Quartz.**

**BRAZILIAN RAW HIDE LACE & BELTING.**

**Wood Polishing Wheels.**

**Nickel Anodes, Nickel Salts, Composition, Crocus, Rouge, Glue, Felt, Flint Paper, Emery Cloth.**

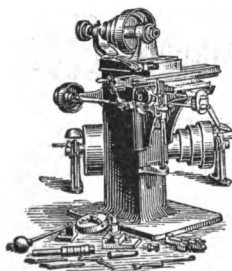
**IMPROVED AUTOMATIC KNIFE GRINDER,**  
PATENTED DEC. 13, 1881.

**ONCE IN MOTION IT REQUIRES NO ATTENTION.**

*Runs in Water, so it never Heats the Knife.*

For grinding all kinds of Long Knives as used on Planing Machines, Trimming Presses, Paper Machines, Leather Splitting Machines, Shears, Tobacco Knives, etc.

**ORDERS FILLED PROMPTLY. — GIVE US A TRIAL.**

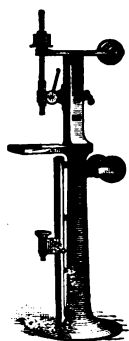


**E. E. GARVIN & CO.,**  
MACHINISTS AND MANUFACTURERS OF  
**Milling Machines, Drill Presses, Hand Lathes,**  
**TAPPING MACHINES,**  
**Cutter Grinders and Wood Planers.**

**MILLING CUTTERS ALL SHAPES AND SIZES.**

*Gear Cutting and Milling in all its Branches. Index Plates Drilled Accurately. Special Tools and Machinery Designed and Built to Order.*

**139-143 CENTRE STREET, NEW YORK.**  
**SEND FOR ILLUSTRATED CATALOGUE.**



## DWIGHT SLATE, HARTFORD, CONN.

MANUFACTURER OF

### THE SLATE SENSITIVE DRILL.

Adapted to rapid work with small drills. Its extreme sensitiveness prevents clogging and breakage of drills. Has a swinging table with attachment for center drilling. Instantly adjustable to different lengths of work. Over 200 already in use.

### COMBINATION GRINDERS,

For grinding Straight and Taper Reamers, Mills, Cutters, &c.

SLATE'S PATENT CUTTING-OFF TOOL, for Lathe use.

*Marking Machines, Light Special Machinery.*

SEND FOR CIRCULAR.

SEND FOR CATALOGUES, PRICE  
LISTS AND SAMPLES.



292 & 294 STATE STREET,  
CHICAGO, ILL.

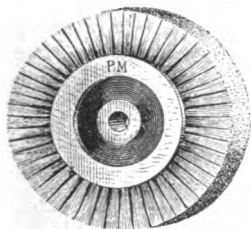
## THE BECKETT & McDOWELL MANUFACTURING CO.,

120 LIBERTY ST., NEW YORK.

WORKS:—ARLINGTON, NEW JERSEY.

—Manufacturers of—

# STEAM ENGINES, MINING AND HOISTING MACHINERY, SHAFTING AND PULLEYS.



CIRCULAR BRUSH.



HANDLE BRUSH.

## P. MAHLER, MANUFACTURER OF BRUSHES, 302 PEARL STREET, NEW YORK.

*Silver Smiths', Silver and Nickel Platers' Circular Brushes and all kinds of  
Brass and Steel Wire Brushes on hand and made to order.*

**GEORGE W. LORD,**  
316 Union Street, Philadelphia.

## **Boiler Cleansing Compound.**

**SOUTHWARK FOUNDRY & MACHINE WORKS.**  
**HIGH SPEED STEAM ENGINES.**

430 Washington Avenue.  
PHILADELPHIA.



**PECK'S PAT. DROP PRESS**  
*BLAST FORGES*  
**STEEL & IRON DROP FORGINGS.**  
Drop Dies and Special Machinery.  
BEECHER & PECK, NEW HAVEN CONN.



**PARSONS & LANDON, Bridgeport, Conn.,**  
MANUFACTURERS OF

## **GRAY IRON CASTINGS,**

Sewing Machine, Fluting Machine, Pumps, Lamp Posts, Hitching Posts, Bed Iron, Well Fixtures, Mantel Frames  
and Summer Pieces, Grates, Sinks, Valves and Valve Wheels, Whip Spikes, Patent Sash Weights,  
Axle Boxes (Soft and Chilled), Opera Chairs, School House Furniture, and

**ALL KINDS OF LATHE AND MACHINERY CASTINGS.**

**Building Columns and Brackets, Sash Locks, and all descriptions  
of Fine Castings at Low Prices.**

**We have two Cupolas and run two kinds of Iron. Patterns made from Drawings.**

**D. BREWER & CO.,**  
42 North Sixth Street, Philadelphia, Pa.

**TWIST DRILLS, BELTING, EMERY WHEELS**  
**AND**  
**Manufacturers' Supplies.**

# The Heliotype Printing Company

211 TREMONT STREET,

BOSTON.

---

Produces Permanent Photographs of

→✥ MACHINERY, VIEWS, PORTRAITS, ✥←

Architectural and Engineering }  
Scientific and Natural History } SUBJECTS.

ENGRAVINGS, MAPS AND PLANS,

DESIGNS AND DRAWINGS,

LETTERS AND CIRCULARS.

---

## The Heliotype Printing Company,

211 TREMONT STREET,

BOSTON.

---

Executes Orders for

Lithography and Photo-Lithography, Color Printing, Electrotypes and  
Stereotypes, Designs and Drawings, Town and Family Histories.

---

ESTIMATES ON APPLICATION.

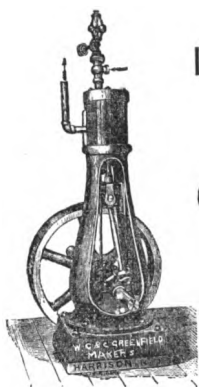
---

SEE FRONTISPIECE.

# THE GREENFIELD VERTICAL ENGINE.

From  $2\frac{1}{2}$  to 30 Horse-Power.

It is Unexcelled in quality of Workmanship  
and Material by any other.



## COOKE & CO.,

12 Cortlandt Street,  
NEW YORK.

—AGENTS AND DEALERS IN GENERAL—

## MACHINERY AND SUPPLIES,

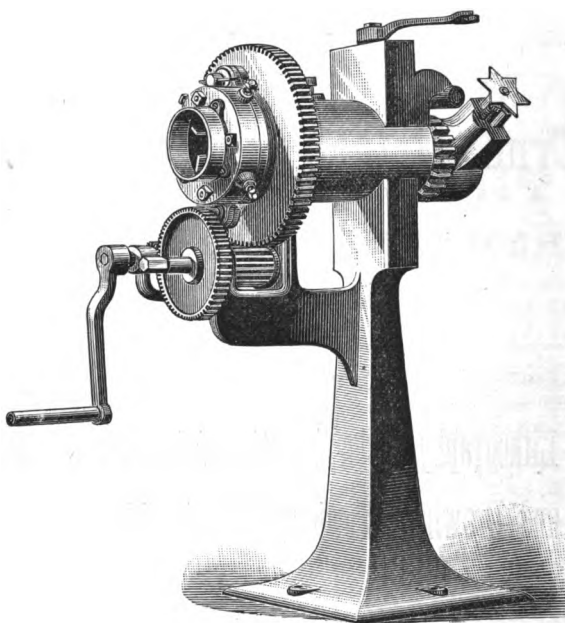
**Water's Governors.**

**KEYSTONE INJECTORS,**

**Watson Forges,—Roots' Blowers,**

**MACHINE TOOLS, Etc.**

*In writing please mention this book.*



We invite attention to the

**"ECLIPSE"**

## Portable Pipe Cutting

—AND—

## SCREWING MACHINE,

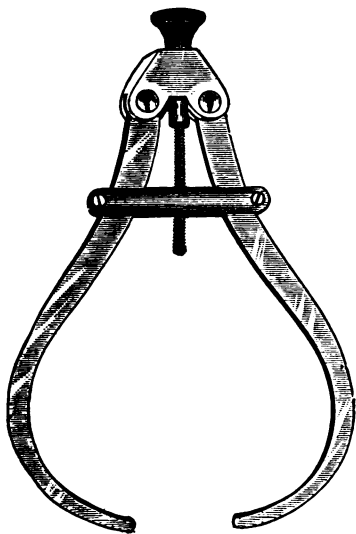
which will be found a very convenient and efficient tool for cutting off and threading, by hand, the larger sizes of Wrought Iron Pipe.

It is so powerfully geared that one man can, with ease, cut off and thread  $2\frac{1}{2}$ , 3,  $3\frac{1}{2}$ , and 4 inch Pipe.

We should be pleased to furnish full descriptive Circulars, with prices, to any one requiring such a tool, which will be found a most useful and labor-saving machine in any Industrial Establishment using pipes of these sizes.

**PANCOAST & MAULE,** 243 & 245 South Third St.  
PHILADELPHIA.





## TOOL DEPOT.

TOOLS AND SUPPLIES FOR  
**Machinists, Jewelers,**  
 CARPENTERS, COACHMAKERS,  
*Amateurs, Model Makers, Engravers,*  
 CARVERS, BLACKSMITHS, Etc.

LATHES, ANVILS, VISES, FILES, WIRE,  
 Hammers, Emery Wheels and Grinders,  
 CHUCKS, TAPS AND DIES,  
 Set, Cap and Machine Screws, Stubs' and  
 Grobet Files, Steel and Tools,  
 SAWS, PLANES, HATCHETS, Etc.

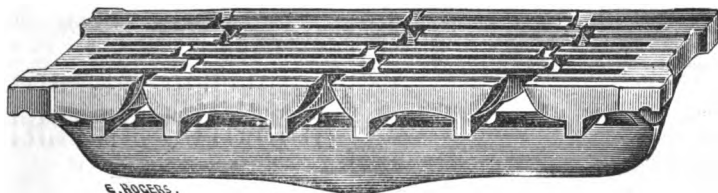
TALLMAN & McFADDEN,  
 No. 607 Market Street, - - Philadelphia, Pa.  
 CATALOGUES FURNISHED ON APPLICATION.

ESTABLISHED 1840.

**DAVID S. CRESWELL,**  
**EAGLE IRON FOUNDRY,**  
 816 Race Street, Philadelphia, Pa.

— MANUFACTURER OF —

**W. C. WREN'S PATENT GRATE BAR,**



E. ROGERS.

FURNACE CASTINGS, DOORS, &c.,      PAVEMENT GRATES,  
 BOILER FRONTS,      SPOUT CASES,  
 STABLE FURNITURE,      LAMP POSTS, &c., &c.

**Estimates Furnished for Iron Work of Every Description.**

**W. HANFORD,**  
**27 TREMONT ROW,**  
**BOSTON, MASS.**

MANUFACTURER OF

**ELEVATORS,**

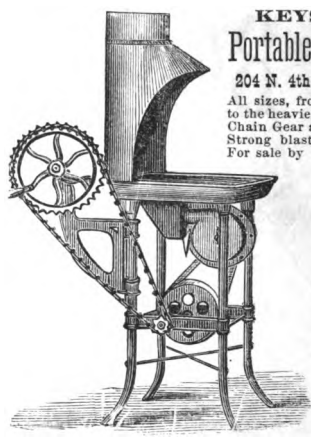
**ENGINES, BOILERS, &c.**

**ELEVATORS MAY BE SEEN**

AT

CITY HALL, PARKER HOUSE, MUTUAL LIFE INS.  
 CO. of Boston, BROWN BROS. Bankers, Wall Street, New  
 York, CORNER OF TENTH & CHESTNUT STS., Philada.,  
 Pa., ROCHESTER SAVING BANK, Rochester, N. Y., and  
 many others.

**KEYSTONE**  
**Portable Forge Co.**  
 204 N. 4th St., Philada.  
 All sizes, from the lightest  
 to the heaviest work, run by  
 Chain Gear and Flat Belts.  
 Strong blast and durable.  
 For sale by



**JONES & LAUGHLINS,**  
 Lake and Canal Streets,  
 CHICAGO.



Noiseless, Unsurpassed for Durability, Simplicity & Cheapness.

**CLARK'S PATENT RUBBER WHEELS,**  
 For Mill and Warehouse Work.

G. P. CLARK, Windsor Locks, Conn.,

Manufacturer of all kinds of

**HAND & PLATFORM TRUCKS.**

**JAMER, JACOBS & CO.,**

DEALERS IN SUPPLIES FOR

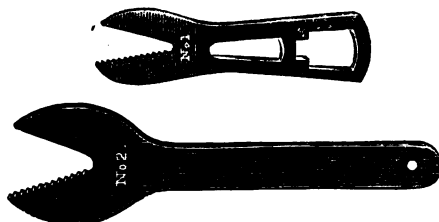
Steam and Gas Fitters, Plumbers, Engineers, Machinists, Engine and Boiler Makers.

**84 JOHN ST., N. Y., and 148 FIRST ST., BROOKLYN, E. D.**

*Illustrated Catalogue upon Application.*

**ALLIGATOR WRENCH.**

Patented August 31, 1875.



Ratchet Teeth cut diagonally. Grips with  
 three teeth on round iron.

**American Saw Company,**  
**TRENTON, N. J.**

**R. M. GILMOUR,**  
 No. 82 JOHN STREET,  
**New York.**

**ASBESTOS MATERIALS.**

**Wick, Piston and Flat  
 Packing, &c.**

**BOILER & PIPE COVERING.**

# THE BOSTON PHOTO ENG. CO.

No. 11 CORNHILL,

BOSTON, MASS., U. S. A.

**MAKE**

## METAL RELIEF PLATES

FOR PRINTING CUTS OF

Buildings, Furniture, Autograph  
Letters, Labels, Portraits, &c.

**➤AT MUCH LESS◀**

**THAN THEY WOULD COST IF CUT ON WOOD,**

**AND**

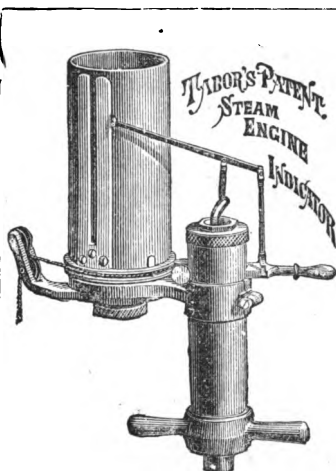
**EVERYBODY IS SATISFIED WITH THEIR WORK.**

T. R. PARRIS, MANAGER.

R. LONGHEAD, SUPT.

---

**MACHINERY A SPECIALTY.**



ESTABLISHED 1851.

## The Ashcroft Manufacturing Co.

Successors to E. H. ASHCROFT,  
"Original Steam Gauge Works."  
THE E. H. ASHCROFT

### Improved "Bourdon" Steam Gauges.

Sole Owners and Manufacturers of

### TABOR'S PATENT STEAM ENGINE INDICATORS,

Specially adapted to

Indicating High Speed Engines and Locomotives.

### STEAM AND WATER GAUGES,

Railway, Steamship and Machinery Supplies.

111 Liberty Street, New York.

Factories, BOSTON &amp; LYNN.

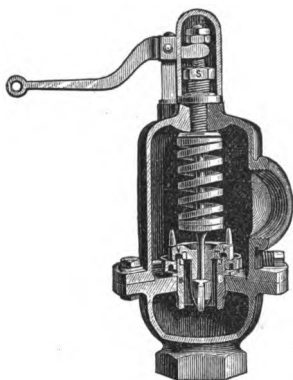
E. L. MAXWELL, Pres.

H. S. MANNING, Treas.

CHAS. A. MOORE, V-Prest.

MARTIN LUSCOMB, Sec'y.

## Save Your Boilers FROM DANGER OF Overpressure!



### THE CONSOLIDATED

CHARLES A. MOORE,

Pres. &amp; Gen. Manager.

MARTIN LUSCOMB,

Sec'y &amp; Treasurer.

GEO. W. RICHARDSON, Supt.

### SAFETY-VALVE

### COMPANY.


CAPITAL, \$100,000.

Sole Manufacturers of the ONLY

### Patent Nickel-Seated "Pop" Safety Valve.

Richardson's Perfect Locomotive "Pop" Valve.

The only Perfect Safety Valve made. Approved by the U. S. Board of Supervising Inspectors. For Stationary, Locomotive, Marine and Portable Steam Boilers.

Our Patents cover all Safety Valves utilizing the recoil action of steam, and familiarly known as "Pop" Safety Valve.  Purchasers beware of infringements of our patent. SEND FOR DESCRIPTIVE CIRCULAR.

SALESROOMS, 111 Liberty St., New York.

MANUFACTORY, 51 and 53 Sudbury St., Boston.

HENRY S. MANNING.

EUGENE L. MAXWELL.

CHAS. A. MOORE.

## MANNING, MAXWELL & MOORE,

MANUFACTURERS OF AND DEALERS IN ALL KINDS OF

## RAILWAY AND MACHINISTS' TOOLS AND SUPPLIES,

No. 111 Liberty Street, New York.

### AGENTS FOR

The Ashcroft Manufacturing Co.  
The Consolidated Safety Valve Co.  
Morse Twist Drill and Machine Co.'s Taps, Dies, Screw Plates, &c.  
The Hancock Inspirator Co.  
Worcester Machine Screw Co.  
Hradky's Emery Grinding Machinery.  
H. B. Bigelow & Co.'s Engines and Rollers.  
Smith's Hub Friction Clutches.  
Brainard Milling Machine Co.

### AGENTS FOR

Keystone Portable Forge Co.  
Midvale Steel Co.'s Tires, Axles, Forgings, and Castings.  
Huntington Track Gauges.  
Saunders's Corrugated Copper Packing and Gaskets.  
Hoopes & Townsend's Nuts, Bolts, Washers, Lag Screws and Rivets.  
Bett's Machine Co.'s Gauges, &c.  
Nile's Tool Works, Machine Shop and Car Tools.  
Westcott's Lathe and Drill Chucks.

FARLEY'S METAL-WORKERS' DIRECTORY.

## DENNISON MFG. CO.

MANUFACTURERS OF

# TAGS

— AND —

## STATIONERS' SPECIALTIES.

### DENNISON'S TOURISTS' TAGS FOR TRAVELERS.

Stratton's Gummed Labels and Gummed Paper of all Colors; Legal and Notarial Seals; Folding and Fancy Tickets; Mentzel's Patent Suspension Rings; The Star Copying Pads; Dennison's Game Counters; Wedding Cake Boxes; Visiting and Playing Card Cases, Etc.

### DENNISON'S TARGETS FOR RIFLE PRACTICE.

Phillips' Hook and Clasp Tags. Kimball's Self-Fastening Tickets. Postal Envelopes. McGill's Paper Fasteners, at Manufacturers' discounts.

## SEALING WAX MAKERS.

### TISSUE PAPERS.

Proprietors "Globe," and Centennial Prize "Excelsior," and Importers of English Grass Bleached and Colored Tissue Papers, from the celebrated 39 Mill.

Proprietors of "Silver White," best article for polishing Silver, and Miller's "Jewelry Cleaning Casket," and "Silver White Casket."

### JEWELERS' BOXES,

Jewelers' Cards, Pink and White Cotton, Fine Twines, Etc.

### DRUGGISTS' BOXES,

Apothecaries' Powder Papers and Counter Papers. Dennison's Shaving Papers.

### DENNISON'S ABSORBENT COTTON,

For Surgical and Dental Purposes.

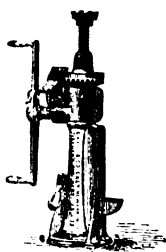
### CARD BOARD MAKERS.

All of our Goods are for sale by Dealers everywhere, and by

## DENNISON MFG. CO.,

21 MILK STREET, BOSTON.  
630 CHESTNUT ST., PHILA'DIA.  
143 WALNUT ST., CINCINNATI.

198 BROADWAY, NEW YORK.  
155 DEARBORN ST., CHICAGO.  
412 NORTH 3d ST., ST. LOUIS.



# GEORGE A. OHL & CO., ENGINEERS AND MACHINISTS,

MANUFACTURERS OF

Lathes and other Machinists' Tools,

BAG AND SACHEL MAKERS' TOOLS,

Carr's Cornice Machines, Ohl's Patent Grate Bars, Tischer's Patent Jack,

212 TO 218 PASSAIC AVENUE,

EAST NEWARK, NEW JERSEY.

THE

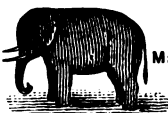
# PHOSPHOR-BRONZE SMELTING CO., Limited,

Offices and Salesroom, 512 Arch Street, Philadelphia, Pa.

OWNERS OF THE

U. S. Phosphor-Bronze

Trade



Marks.

SOLE MANUFACTURERS OF

Phosphor-Bronze

PATENTS.

"Phosphor-Bronze."

IN THE UNITED STATES.

# PHOSPHOR-BRONZE CASTINGS,

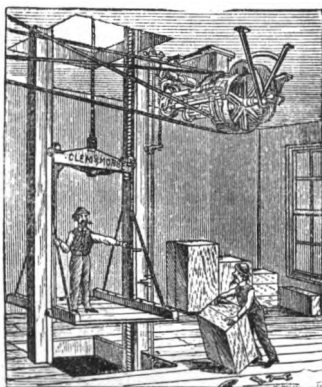
For Piston Rings, Valves, Pinions, Cog Wheels, Hydraulic Press and Pump Barrels, Bearings, Slides, Gibbs, Bushings, and all purposes where great **STRENGTH, DURABILITY** and **RESISTANCE TO CORROSION** are required.

# PHOSPHOR-BRONZE BEARING METAL

Is the Standard of Excellence, and is Unrivalled in Wearing, Anti-Frictional and Non-Cutting qualities.

PHOSPHOR-BRONZE, WIRE, WIRE ROPE, WIRE CLOTH, SHEETS, PLATES, &c.

Send for Pamphlets and Price Lists.



Stephen A. Morse.

C. M. Williams.

Edwin F. Morse

# CLEM & MORSE,

MANUFACTURERS AND BUILDERS OF

Patent Hydraulic, Steam, Belt and Hand Power

PASSENGER AND FREIGHT

# ELEVATORS,

WITH MOST APPROVED SAFETY DEVICES.

Main Office and Works,

413 Cherry Street, Philadelphia, Pa.

Branch Office: 108 LIBERTY STREET, NEW YORK.

Agencies at numerous places.

Send for Circulars.

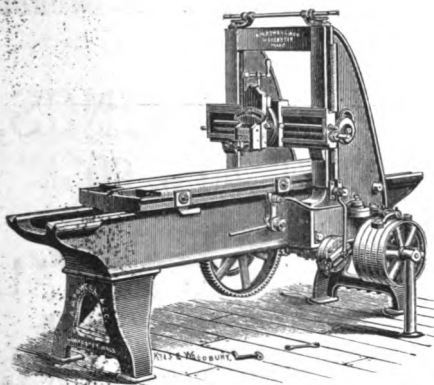
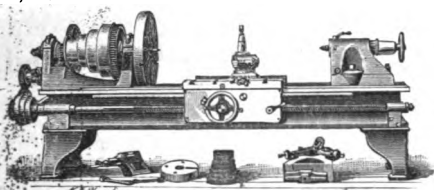
# A. M. POWELL & CO.,

MANUFACTURERS OF

## IRON WORKING MACHINERY,

Office and Works No. 136 to 140 Union Street,

WORCESTER, MASS., U. S. A.



Engine Lathes, Planers,

→ RADIAL DRILLS, ←

CHUCKING LATHES,

PULLEY TURNING LATHES,

Shafting Lathes

AND

**BORING MILLS.**

From New and Improved  
Designs and Extra  
Heavy Patterns.

➤ SEND FOR ILLUSTRATED CIRCULARS AND PRICES. ➤

## The Lancaster Manufacturing Company,

Sole manufacturers and licensees of James H. Lancaster's Patent

SCREW PLATES FOR PIPE & BOLTS.

"TWIN" PIPE CUTTERS WITH BURR SCRAPERS.

COMBINED PIPE CUTTER, BURR SCRAPER & WRENCH.

Pipe Inside Burr Reamers.

Combined Punch, Shear & Wire Cutter.

COMBINED PUNCH, SHEAR, WIRE CUTTER, VICE AND ANVIL. NUT & PIPE WRENCHES.

COMBINED MANUAL AND POWER DROP AND TRIP HAMMER, &c.

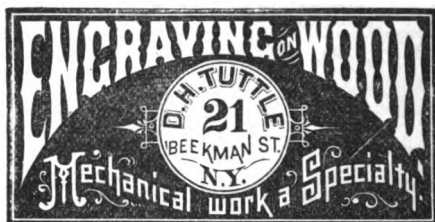
OFFICE AND WORKS:

95 & 97 Liberty Street, - New York, U. S. A.

SEND FOR FULL CATALOGUES AND TRADE DISCOUNTS.

**HIRAM H. FISHER,**  
 MAKER OF  
**CAST IRON**  
**GAS & WATER PIPE,**  
 AND  
**CAR CASTINGS**  
 OF EVERY DESCRIPTION,  
**ALLENTOWN, PA.**

**NEW YORK MACHINE CO.,**  
 MACHINISTS,  
 CHAS. WIDMER, Manager,  
 13 Baxter St., New York.  
 MANUFACTURERS OF  
**FOOT & POWER PRESSES,**  
 DROP HAMMERS, SHAPING MACHINES,  
 UPRIGHT DRILLS, DIES, TOOLS,  
 AND  
 MACHINERY OF ALL KINDS  
 MADE AND REPAIRED.



I. SCHOENBERG, Prest.

S. BLONDHEIM, Sec'y.

**THE SCHOENBERG METAL MFG. CO.,**  
 Manufacturers of and Dealers in  
**SOLDER, TYPE METAL,**  
 Lead Pipe, Sheet Lead, "Solder Wire," Stereotype, Electrotype and Babbitt Metals,  
**WORKS:—528 & 530 E. 20th, 525 & 527 E. 19th Sts., NEW YORK.**

**BAIRD'S BOOKS**  
 FOR  
**PRACTICAL MEN.**

Our large Catalogue of Practical and Scientific Books, 96 pages 8vo., and our other Catalogues, the whole covering every branch of Science Applied to the Arts, sent free to any one in any part of the World who will furnish his address.

**HENRY CAREY BAIRD & CO.**  
 Industrial Publishers, Booksellers & Importers,  
 810 WALNUT ST., PHILADELPHIA, PA.

Patented May 9th, 1882.

**GEORGE C. TAFT,**  
 SHOP,

34 Southbridge St.,  
 WORCESTER, MASS.,

MANUFACTURER OF  
 Improved Upright and  
 Horizontal Self-Feed

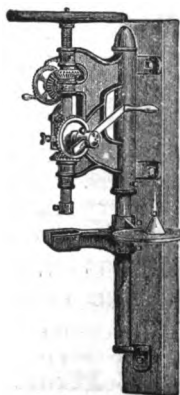
**Drilling Machines**

For Blacksmiths' and Carriage Makers' use.

Sold wholesale and retail by  
 James Beggs & Co., No. 9 Dey  
 St., N. Y.; Maxwell, Manning &  
 Moore, 41 Liberty St., N. Y.  
 Also by Winternitz & Bro., 79  
 S. Howard St., Baltimore, Md.

Illustrated Catalogues sent Free,  
 on application, describing different

**HAND and POWER**  
**Drilling Machines.**





# **F. S. LOVELL,** **FITCHBURG, - - MASS.**

MANUFACTURER OF

**Engine Lathes, Hand Lathes Warren Patent  
Planer Chuck & Improved Planer Center,**

ALSO,

## **MILL MACHINERY,**

**Shafting, Pulleys, Hangers, and all kinds of  
Jack Screws, including**

## **LOVELL'S IMPROVED RATCHET JACK SCREW,**

Which is far superior to any Jack ever made for quickness and ease in working and convenience in small places.

**FOR DURABILITY IT CANNOT BE SURPASSED. SEND FOR CIRCULAR.**

*I am ready to receive orders for all kinds of machinery, and will guarantee to give satisfaction.*

**CARPET MACHINERY A SPECIALTY.**

---

# **HEWES & PHILLIPS'** **→\*IRON WORKS\*←** **NEWARK, N. J.**

MANUFACTURERS OF

**Planers, Lathes, Gear Cutters,  
SHAPERS, SLOTTERS,**

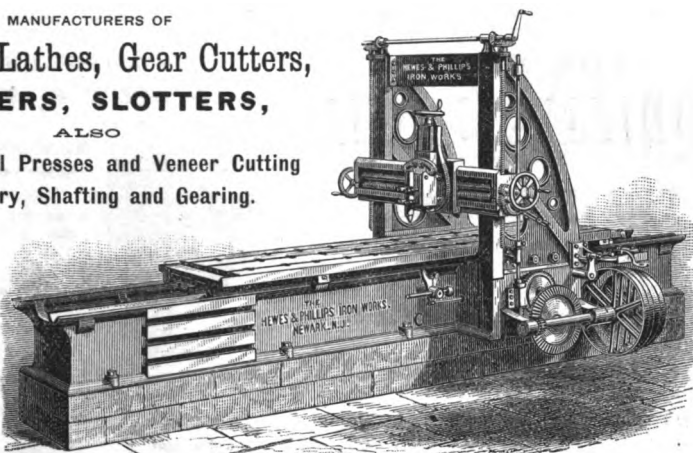
ALSO

**Hydraulic Oil Presses and Veneer Cutting  
Machinery, Shafting and Gearing.**

**HEAVY  
PLANERS**  
A Specialty.

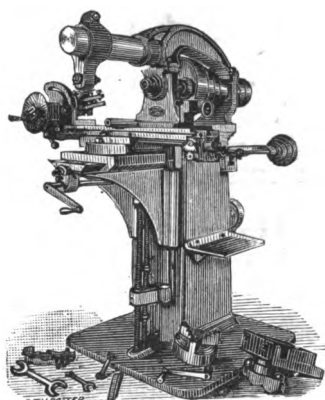
One 10 in. Slot-  
ter in Stock.

One 48 in. x 48 in.  
x 12 ft. Planer  
in stock.



**L. M. RUMSEY MFG. CO., Agents, St. Louis.**

WRITE FOR PARTICULARS.



UNIVERSAL MILLING MACHINE.

Manufactured by  
A. ALEX. POOL & CO., Newark, N. J., U. S. A.

## CROUCH'S PATENT AIR BUFFER

FOR FREIGHT AND PASSENGER CARS.

A perfect appliance for almost instantaneous stopping of trains.

Is being adopted by all the prominent railroads.

**WESLEY CROUCH,**

Office: 108 EAST MAIN STREET,  
ROCHESTER, N. Y.



MACHINISTS' PATTERN  
AND  
BRAND LETTERS.

**VANDEBURGH, WELLS & CO.**

110 Fulton and 16 & 18 Dutch Streets,  
NEW YORK.

ALFRED WILKINSON,  
CONSULTING ENGINEER,  
Manayunk, Phila., Pa.

## THE NEWELL UNIVERSAL MILL,

Pulverizes everything—hard, soft, sticky and gummy. Grain, Drugs, Chemicals, Clay, Guano, Cotton Seed, Bark, &c., &c.

A wonderful machine for grinding  
Corn, Oats, Feed, &c., &c.

**STEAM ENGINES & BOILERS**  
OF ALL SIZES,

for Farmers' and Manufacturers' use—at lowest prices. Send for Circular. Address,

34 Cortlandt St., New York.

RANDOLPH BRANDT,  
534 Water Street, New York.

SELDEN'S  
PATENT  
Packing,



With  
and without  
RUBBER CORE.







**This book is under no circumstances to be  
taken from the Building**

[illegible]

form 410

FEB 9 - 1925

